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# REPORT

OF THE

## AGRICULTURAL AND MECHANICAL COLLEGE

### OF TEXAS

LOCATED AT COLLEGE STATION, BRAZOS COUNTY



AUSTIN:  
HENRY HUTCHINGS, STATE PRINTER.  
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## REPORT OF BOARD OF DIRECTORS.

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*To The Hon. L. S. Ross, Governor of Texas:*

The Board of Directors of the Agricultural and Mechanical College of Texas have the honor to submit for your consideration the following report showing the operations of the College since their last biennial report, its present condition, and what is needed to place the institution in a position to accommodate present patronage and to provide room for the many who are knocking at its doors for admission, but cannot be received for lack of dormitory facilities.

At present the Board consists of the following named persons: A. J. Rose, president; W. R. Cavitt, John Adriance, J. D. Fields and L. L. Foster. Directors Adriance and Fields were appointed to fill vacancies created by the resignations of C. C. Garrett and G. M. Dilley, who were members at the date of our last report.

Changes have been made in the government and faculty of the College during the past two years, as follows:

The offices of Chairman of the Faculty and Agent of the Board of Directors were abolished and the offices of President and Vice-President revived and the general government of the College vested in the president, and in case of his absence or sickness, the vice-president, as was formerly the case during one of the most prosperous periods in the history of the College. This action was taken after mature consideration and calm deliberation, and embodies the best judgment of the Board in regard to the changes essential to the continued growth and prosperity of the College.

Gov. L. S. Ross, identified with the people of Texas by long years of public service, both in war and peace, and possessing in an eminent degree the executive and administrative ability necessary to success, was chosen president and has agreed to enter upon the discharge of the duties of the office at the expiration of his term of office as governor. Dr. W. L. Bringhurst, for seven years past Professor of English in the College, was elected vice-president and has been acting president since July 1.

The Experiment station was reorganized at the June meeting of the Board. Prof. F. A. Gully, director of the station,

resigned and Prof. G. W. Curtis, professor of agriculture, was elected director in his stead.

Upon the resignation of Prof. L. L. McInnis as professor of mathematics, Prof. Charles Puryear, professor of civil engineering and physics, was transferred to that position, and Mr. J. C. Nagle, a young Texan of excellent qualifications and a graduate of the State University, was elected to the chair of civil engineering and physics.

The vacancy caused by the resignation of T. L. Brunk, professor of horticulture and botany, was filled by the election of Prof. S. A. Beach, a learned and skillful gentleman.

Lieut. W. S. Scott, commandant and instructor in military science and tactics, tendered his resignation and the War department detailed in his stead Lieut. Benj. C. Morse, of the Twenty-third infantry, as commandant of the institution.

The Rev. C. P. Fountain, chaplain of the College for the past two years, who discharged the duties of his sacred office ably and faithfully, resigned and has been succeeded by Rev. T. C. Bittle, accomplished scholar, gentleman and minister.

#### CONDITION AND NEEDS OF THE COLLEGE.

That the College is making substantial and steady progress is abundantly evidenced by the fact that its present patronage is only limited by its power to accommodate, and, notwithstanding the fact that notice has been given in the public prints that the College is filled to its utmost capacity and is unable to receive additional students, applications for admission are being received almost daily from those who choose to avail themselves of the splendid opportunities the College offers to such as desire to equip themselves for the practical duties of life.

On the opening of the present session there were present a larger number of students than could be accommodated with room, even by placing three, and in some instances four students in a room where but two should be quartered. It is, therefore, absolutely necessary, if the people of Texas are to avail themselves of the educational facilities already provided by them for the instruction of their sons in the science of agriculture and the mechanic arts, that additional barracks be erected. Had the rooms been provided the enrollment would no doubt have approximated five hundred during the present session, judging by the number of applicants rejected to date, and our experience heretofore. During all former sessions the number present on the opening day has been more than doubled by the end of the term. The present session opened

with two hundred and fifty, and the enrollment to date amounts to two hundred and eighty-four, so that the session would undoubtedly have closed with five hundred present, could they have been furnished with room.

Not only do we need room for more students, but more room for those already in attendance. The capacity of the College barracks is one hundred and fifty, estimating two students to each room; we, therefore, need rooms for one hundred students now in attendance and crowded in existing quarters. The Board have only permitted this as a temporary expedient, with full confidence that the Legislature would provide the necessary relief at its next session. It is the unanimous judgment of the professors in charge and of the Board that not more than two students should be permitted in each room as a permanent policy of the institution, and we therefore ask that an appropriation of at least \$50,000.00 be made by the Legislature for the purpose of furnishing barracks adequate for the immediate demands on the College for rooms. To accommodate these students it will also be necessary to enlarge the mess hall to double its present capacity, which can be done at a cost of \$15,000.00.

The last Legislature appropriated the sum of \$2000.00 to secure a water supply to be derived from an artesian well. Piping was purchased and a contract entered into for boring a well, but the contractor abandoned the well at a depth of 400 feet, and no one could be gotten to undertake its completion. The pressing need of some sort of water supply rendered it necessary for something to be done to secure it, and a number of cisterns were built with the money left from purchasing piping and making preliminary arrangements for the artesian well. These cisterns do not more than supply drinking water, much less the quantity necessary for bathing, stock, water closets and various other purposes. Therefore, whatever other suggestions of the Board, if any, may be passed unheeded the request for an abundant water supply should not. Cleanliness, health, and the very lives of students are dependent upon it, and the sum of at least \$10,000.00 should be appropriated for this purpose.

The chemical laboratory of the College is located on the ground floor of the main building, in which are located the section rooms, and we renew the recommendation heretofore made that an appropriation be made to build a laboratory at a point far enough removed from the College to eliminate the danger from that source to the health of the students and the



destruction of the buildings by fire. For this purpose the sum of \$12,000.00 will be required.

The veterinary department is also located on the ground floor of the main building and must be removed both on account of the unpleasant odors arising from the keeping of dead animals therein, and the necessity for room in which to properly instruct the class in veterinary science, many of whom have now to stand during recitation on account of the crowded condition of the room. The sum of \$10,000.00 will be needed for this purpose. The rooms that will be made vacant in the main building by the removal of these two departments are badly needed for section rooms, and can be immediately used for that purpose.

The department of mechanical engineering needs to be enlarged to accommodate the additional demands made on it by reason of the increased attendance upon the college. New forges, turning lathes, carpenter's tools, etc., and a new carpenter's shop are necessary to meet the increasing demands for instruction in this department of the College. The sum of \$10,000.00 for buildings and \$2000.00 for tools should be appropriated for this purpose.

A building for a drill hall and gymnasium should be erected for use in drill exercises during rainy weather, and the development of the physical powers of the students during leisure hours. It will require \$5000.00 to erect a building suitable for this purpose.

Additional professor's residences are needed to meet the demands made upon the Board by those professors who have found by experience that it is not good for man to be alone.

The Board desire to encourage compliance with the divine injunction by meeting their demands, and therefore request an appropriation of \$7500.00, which will build three additional residences. The absolute necessity for this is apparent from the fact that there are no buildings at or near the College except those erected by the Board.

In addition to the regular experiment station at the College the Board have established branch experiment stations at the following places: Harlem, on the State farm, in Fort Bend county, in connection with State Penitentiary authorities, for experiments in the growth of sugar cane, manufacture of sugar and syrup.

At Gatesville, Coryell county, in connection with State reformatory authorities, for experiments in the growth of various grasses.

At McGregor, McLennan county, in connection with the

State Grange authorities, for experiments in wheat growing.

An orchard has also been planted near Rusk, in Cherokee county, and another in Walker county, for experimenting in the growth of fruit, but lack of means has prevented that attention to these several stations necessary to the best results. It is the purpose of the Board to establish a branch station in each section of the State representing a distinct soil and climate at the earliest moment practicable. A station is now in contemplation in the black land belt in North Texas and another in the Panhandle. For the enlargement of these several stations and the establishment of new ones the sum of \$5000 is respectfully requested. The stations can be operated with the fund appropriated for that purpose by congress, but none of it can be used to establish them.

The department of horticulture and botany is in need of additional hot house room and a number of microscopes, for use of students, and one for making original researches in horticulture and botany. The sum of \$1500 is necessary for this purpose.

The instruction given in this department being in direct response to the purposes for which the College was established, the importance of its adequate equipment will be at once apparent. The need of better lighting of the rooms of students at the College has been supplied by providing electric lights by contract with the Bryan Electric Light company. In order to wire the building and provide the lamps necessary we respectfully ask an appropriation of \$600.00.

We have thus set out in detail the various appropriations necessary to enable the College to meet the demands now being made upon it by the people of Texas for an education adapted to the wants of the practical, every day life of the masses. We have now a plant erected at a cost of \$276,162.00, capable of furnishing room and instructions for two hundred and fifty students.

By appropriating the sums above asked for, double that number can be provided for, and it remains for the Legislature to say whether or not this shall be done and additional facilities provided for educating the young men of Texas in home institutions of learning.

By the addition of one-third to the value of the present buildings and equipments, the capacity of the College can be doubled, and every demand of the people for industrial education fully met and satisfied.

During the past year one professor's residence has been erected at a cost of \$2,000.00. The new Assembly Hall, costing

\$20,000.00, has been completed, and the various departments of the College enlarged and improved to meet the increased demands made upon them.

Your careful attention is invited to the interesting reports of the several professors and officers accompanying this report for a detailed statement of improvements and additions, as well as for the present condition of the different academic departments.

By reference to the report of Vice President Bringham it will be seen that considerably more than the usual appropriation of \$15,000.00 per annum is necessary for the liberal maintenance of the College, in order to meet the rapidly increasing demands now being made upon its educational capacity.

Twenty thousand dollars per annum will hereafter be needed for this purpose.

The following is a summary of the appropriations asked for:

For additional barracks.....	\$50,000
For chemical laboratory buildings and equipment	12,000
For one carpenter's shop.....	10,000
For tools for mechanical engineering department.	2,000
For veterinary hospital building and equipments.	10,000
For establishing and enlarging experiment stations	5,000
For artesian water and bath houses.....	10,000
For horticultural hot house and equipments.....	1,500
For enlarging mess hall .....	15,000
For electric light plant .....	600
For professors' residences .....	7,500
For drill hall and gymnasium.....	5,000
Total... ..	\$128,600

We have thus presented as briefly and plainly as possible the condition and needs of the College. All of the appropriations asked for are necessary to enable the institution to meet the demands now being made upon it. The appropriation for additional dormitories, enlargement of the mess hall, artesian water and electric lights are imperatively demanded, unless the doors of the institution, which have already been closed for want of these things against hundreds of the young men of Texas, as much entitled to enjoy the advantages of the institution as any who are now within its walls, are to remain so. We believe there is too much patriotism and public spirit in the representatives of the people to stand still or take any backward step when the means to go forward are at their disposal, and we therefore confidently expect such a response from the lawmaking power to the demand for increased facilities for industrial education as will be worthy of our great and growing State.

In conclusion, we take pleasure in testifying to the successful management of the College by Vice President Bringham

since its affairs were committed to his care, and to the competent and faithful discharge of their duties by the several professors and instructors.

Respectfully submitted.

A. J. ROSE, President,

W. R. CAVITT,

L. L. FOSTER,

J. D. FIELDS,

JOHN ADRIANCE.

Board of Directors.



## PRESIDENT'S REPORT.

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DECEMBER 1, 1890.

*Major A. J. Rose, President Board of Directors of the Agricultural and Mechanical College of Texas :*

DEAR SIR: The laws of this College impose the following duty on the president of the College:

10. It shall be his duty to carry out the provisions of the following section from the law of Congress:

Section 5, IV. An annual report shall be made regarding the progress of each College, recording any improvements and experiments made, with their costs and results, and such other matters including State industrial and economical statistics as may be supposed useful, and copy of which shall be transmitted by mail free, by each, to all the other Colleges which may be endowed under the provisions of this act, and also one copy to the Secretary of the Interior.

In compliance with that duty, I have the honor to submit the following report :

On the first of last July, as you will remember, I was directed to take charge of the affairs of the A. & M. College. Since that time what humble ability I possess has been active in its cause. I proceeded at once to advertise the institution under its new auspices, reducing the cost of the necessary outlay to one-third of the usual annual expenditure for this purpose.

My attention was engaged during the summer by the preparations for the coming session. Contracts for a supply of meat and wood were attended to, the barracks and buildings and furniture thoroughly washed and renovated, the student rooms in mess hall were replastered and painted—so that now they are fair to see—the students' dining room was cleaned and painted, fly screens for the same ordered, the hospital was in part painted and improved, some work and repairs on the main building were done, outhouses repaired, professors' houses repaired, accommodations for the gardener's family provided, cisterns, etc., mended, new crockery and supplies for the mess hall purchased, a large supply of new bedsteads and mattresses purchased, and other measures too numerous perhaps to mention were carried out, which were made imperative by existing deficiencies, or decay and dilapidation.



I am proud to be able to say to you that the College seems to be thrilling with new life. Activity and energy and prosperity are in all of its departments. We have a zealous and united faculty, and an industrious and responsive corps of students. Excellent progress is being made, and all things are, in my judgment, working together for the good of the institution, the realization of whose "high destiny" is imminent.

The health of the students has been better since the opening of the session than I have ever known it at the College. The surgeon has nothing in the world to do but sit on his gallery and watch the golden autumn days expire. May his idleness continue!

The present session commenced on the tenth of September, and immediately the attendance was so great, taxing our capacity to the utmost and crowding even to considerable discomfort, that, under authority of the president of the Board, I gave notice in the leading newspapers of the State, and through the students, that the College was full. Notwithstanding the general notice given, I have continued to receive many applications and importunities for admission. These, coming from Texas and other States and Territories, and from Mexico, I have generally rejected. Since the opening we have had in constant attendance about two hundred and sixty students. This is more than present accommodations justify. If we had had room, I believe five hundred young men would have gathered beneath our rooftree before Christmas. In order to dispose of the unusual number of matriculates, I was compelled to use several rooms in the main building for dormitory purposes, and there are now about twenty of the boys living on the third and fourth floors. Rooms in the assembly hall and mess hall which were not intended for the use of students are now occupied by them. I desire to call your attention especially to the fact that we have scant accommodations for even a limited number of students, and to the necessity of providing quarters for the inevitable increase in the future. There are in Austin Hall, Pfeuffer Hall and Mess Hall barracks, seventy rooms, all of rather small dimensions. These are the only rooms which ought to be used for quarters. In each of them there are three and four students. The practice of putting more than two boys in a room is sure to prevent the best results. The problem of study and good order at this institution will be solved, I respectfully submit, when we have space enough to quarter two in a room and no more. Any other arrangement is incompatible with decency and civiliza-

tion. The housing of boys at school should approximate the careful and wholesome customs of the best ordered families, and the greater the departure therefrom, the greater the danger of disorder, poor discipline and unsatisfactory progress in study. I would suggest the raising of Pfeuffer Hall and Austin Hall one story, making three-story buildings of each ; and the construction, in addition, of another three-story building to contain at least fifty rooms. This would give you about two hundred rooms, or comfortable accommodations for four hundred students. I doubt not that the Legislature, impressed with the importance of this institution, and the good work being accomplished here, will appropriate the funds required. Of all the present interests and needs of the A. & M. College, I consider the securing of roomy and comfortable quarters for the students the most worthy of your consideration.

In view of the fact that this is bound to be immediately the great school of Texas, I would recommend as prime necessities the following changes, additions and improvements.

The dining hall is crowded when two hundred and fifty are seated in it. The kitchen and storeroom are both too small. Ampler accommodations should be provided for the mess hall department, for upon the proper and successful management of that in a large measure depends the prosperity of the institution.

The present chemical laboratory and rooms are in the main building. A separate building for chemical laboratory, provided with all modern improvements, should be erected. The great importance of this department, the part that it must play in the future development of the various scientific and practical features of the College work, calls for unstinted provision in its behalf. At present the department is much cramped for want of room and sufficient facilities. A suitable laboratory would cost about \$12,000.

The whole veterinary establishment, consisting of work shop, clinical rooms, etc., should be at a respectable distance from the main building, in which it is now situated. The application of say \$5000 for this purpose would enable the accomplished specialist who directs the work of this department to make the college a center of veterinary interest in the south west. Under the existing arrangement we have not an adequate number of rooms for recitations and lectures. At some hours indeed we have more classes than rooms to hear them in. By removing from the main building the chemical and veterinary establishments this pressure, which will otherwise

continue, and be detrimental to the progress of the students will be relieved.

A beautiful and symmetrical unfolding of the possibilities of the institution will never be attained, perhaps, until a first-class artesian well is provided. An abundant water supply would mitigate the discomforts of our parching summers, give life and effect to agricultural and horticultural operations at the College, make practicable the care and the preservation of stock, render the campus and grounds more attractive, and enable us to better provide for the health of the growing community by the establishment and maintenance of better bath houses, water closets, sewerage, etc. No oasis will smile like this spot if you will go down to the subterranean store-houses and bring up treasures of perpetual water. I presume an artesian well at the College will cost from \$4000 to \$5000.

The horticultural department needs a house for work in the winter. The present green-house is not sufficient. A building to cost \$1000 ought to be added to it. This would increase the usefulness and efficiency of the department.

An addition to the creamery for cheese making should be built. The creamery has proven such a success in the way of instruction and enlightenment to the students and people of the State that I think it would be profitable to encourage the collateral industry of cheese making. The professor of agriculture will be able to give you further information on the subject.

A more commodious piggery should be provided. I am told that one of the inhabitants of the present by no means palatial residence for pigs weighs 700 pounds. If we can raise more like him we shall have our own lard. Five hundred dollars would probably cover the cost of enlarging the accommodations at the piggery.

We are short of houses for professors. A president's house, to cost say \$4000, should be built, and one more professor's residence, at a cost, say, of \$2000. I know at least one professor who has powerful matrimonial intentions, but until now has hesitated to change his state because of the uncertainty of a place of abode.

I would recommend the erection of a gymnasium to consist of a suitable building and apparatus to cost about \$5000. Such an addition to our College advantages would prove of immeasurable benefit to the students. It is an incontestable fact that the exercise practiced in a college gymnasium is not only directly improving and beneficial both as to mind and body, but in a great degree uses and exhausts the superabundant vital-



ity and animal spirits of the vigorous young man, which might, if left to seek other means of escape or assertion, prove mischievous to the individual and his environment. A gymnasium is a very important thing at an isolated college, which must contain within itself most of the resources of improvement and national enjoyment.

I would recommend the building of suitable houses for the foremen in the practical departments and for the better class of labor. The old farm house ought to be taken down. Better accommodations for the mess-hall employes—the cook, the baker, and the waiters—should be provided.

The “old shop” belonging to the department of mechanical engineering, in which the students of the third and fourth classes now receive instruction in that department, is a rude and shaky old shell, dangerous in case of fire, and ought to be demolished to give place to a permanent, substantial building.

The library needs more books and equipment.

These above named are the most important wants of the College. I might indicate others, for it is natural to colleges to have numerous wants, but I forbear. I trust that measures will be taken to meet the deficiencies and complete the equipment of the College. The wants of the College are educational necessities, therefore I have dwelt upon them.

The measures that in the wisdom of the Board have already been adopted for the welfare of the College are bearing fruit. I am confident that your decisions hereafter will confirm the prosperity of the institution, and establish it upon an impressive foundation in the hearts of the people. It shall be an institution deriving its strength from sympathy and association with the principles and facts of republican progress. Scorning pedantry and superficial learning, its usefulness will live and grow and blend harmoniously with the best forces that shape the destiny of the State of Texas.

#### REGULAR COURSES OF STUDY.

There are two regular courses of study and practice leading to degrees and extending through four years each. They are identical for the first year, thus giving the student the advantage of elementary training in subjects that are of equal importance to everyone, and affording opportunity for intelligent choice between the courses as continued separately through the three succeeding years. In the third year, or second class, there is still further specialization by which the student may, in the agricultural course, vary his studies with reference to obtaining either of two degrees; that is, Bachelor of Scientific Horti-

culture (B. S. H.), or Bachelor of Scientific Agriculture (B. S. A.). In the mechanical course a similar specialization is provided for, by which the student is given choice between the degrees of Bachelor of Civil Engineering (B. C. E.) and Bachelor of Mechanical Engineering (B. M. E.).

All regular students must pursue either the Agricultural or the Mechanical course, and there is no course of instruction which is not industrial.

The Third class all take Latin, but it is optional with the students of the other classes. German and Spanish are also optional, except as shown in the curricula, and may be studied as subjects outside of the regular courses. There is no charge for any optional study.

In view of the great practical importance of the German and Spanish languages for business purposes in the State, special attention is given to them. A large number of the students are of German descent and speak the language fluently. By association with these, young men may have continual practice in conversation out of the class room as well as in it.

## AGRICULTURAL COURSE.

### FIRST YEAR—FOURTH CLASS.

#### *Fall Term.*

Hours per week.	
5	Mathematics... Arithmetic (Robinson).
5	English... Grammar, composition and declamation.
1	Zoology.....
4	Domestic animals.....
3	Shop.....Carpentry work.
3	Drawing.....Free hand.
5	Infantry drill.....

#### *Winter Term.*

5	Mathematics.....Arithmetic and algebra.
5	English.....Grammar, composition and declamation.
1	Botany.....
2	Elementary Agriculture...
2	Zoology.....
3	Shop.....Carpentry work.
3	Drawing.....Free hand and penmanship.

#### *Spring Term.*

5	Mathematics.....Algebra.
5	English.....History of Texas, composition, declamation.
3	Botany.....
3	Shop.....Carpentry work.
$1\frac{1}{2}$	Drawing.....Free hand and penmanship.
$1\frac{1}{2}$	Field work.....
$1\frac{1}{2}$	Garden work.....
3	Infantry drill.....

## SECOND YEAR—THIRD CLASS.

*Fall Term.*

5	Mathematics.....	Algebra.
2	Dairying.....	
2	Large fruit culture.....	Lectures.
4	English.....	Grammar, rhetoric, composition and declamation.
1	Physiology.....	
3	Elementary physics.....	
3	Large fruits and nursery..	
1½	Free hand drawing.....	
5	Infantry drill.....	

*Winter Term.*

5	Mathematics.....	Algebra and geometry.
2	Selection of dairy stock...	
2	Large fruit culture.....	Lectures.
4	English.....	Advanced grammar, rhetoric, U. S. history, composition and declamation.
1	Physiology.....	
3	Elementary physics.....	
3	Creamery work.....	
1½	Large fruits and nursery..	
1½	Free hand drawing.....	

*Spring Term.*

5	Mathematics.....	Algebra and geometry.
2	Stock breeding.....	Lectures.
4	English.....	U. S. history, Comp. and Dec.
2	Vegetable culture.....	
1	Physiology.....	
2	Tactics.....	
3	Creamery work.....	
1½	Gardening.....	
1½	Free hand drawing.....	
3	Infantry drill.....	

## THIRD YEAR—SECOND CLASS.

For the Degree of Bachelor of Scientific Agriculture.

*Fall Term.*

4	Mathematics.....	Geometry and Higher Algebra.
4	Inorganic Chemistry.....	
1	Veterinary Medicine.....	
2	Entomology.....	
3	Feeding of Live Stock.....	
2	English.....	Lockwood's.
5	Creamery work and practical feeding.....	
2	Analytical chemistry.....	
3	Infantry drill.....	

*Winter Term.*

4	Inorganic chemistry.....	
1	Veterinary medicine.....	
2	Economic botany.....	
4	Mathematics.....	Geometry and higher algebra.
2	Feeding of live stock.....	
2	English.....	Myer's outlines of general history.
2	Book-keeping.....	
2	Practice.....	
1	Cattle feeding.....	
2	Analytical chemistry.....	

*Spring Term.*

4	Mathematics.....	
4	Organic chemistry.....	
1	Veterinary medicine.....	
2	Feeding of live stock.....	
2	English.....	Outlines, general history and essays.
2	Surveying.....	
1	Book keeping.....	
2	Field experiments and veterinary science, practice in each.....	
5	Analytical chemistry.....	
	Surveying.....	
2	Mechanical drawing.....	
3	Infantry and artillery drill	

## FOURTH YEAR—FIRST CLASS.

*Fall Term.*

3	Agricultural chemistry....	
2	Geology.....	
2	Farm drainage.....	
2	Forestry.....	
2	English.....	Literature and essays.
3	Veterinary surgery, anatomy and materia medica	
2	Experimental agriculture..	
2	Business law.....	
5	Analytical chemistry.....	
2	Veterinary practice.....	
2	Agricultural experiments.	
	Forestry.....	
3	Infantry drill.....	

*Winter Term.*

2	Elementary mechanics....	
2	Geology.....	
2	Plant Histology.....	
3	Fertilizers.....	
2	English.....	Literature and essays
3	Veterinary surgery, anatomy and materia medica	
2	Experimental agriculture	
1	Lectures on military science.....	
2 $\frac{1}{2}$	Analytical chemistry..	
2 $\frac{1}{2}$	Dissecting.....	
3	Microscopic work in histology.....	

*Spring Term.*

3	Elementary mechanics....	
3	Farm management.....	
1	Lectures on English literature.....	
3	Veterinary surgery, anatomy and obstetrics.....	
1	Astronomy.....	
2	Experimental agriculture..	
2	Civil government.....	
2 $\frac{1}{2}$	Analytical chemistry.....	
4	Agricultural experiments.	

- 2½ Microscopic work in veterinary laboratory.....  
 3 Infantry drill.....  
 Graduation thesis.....

## THIRD YEAR—SECOND CLASS.

For the Degree of Bachelor of Scientific Horticulture.

*Fall Term.*

- 4 Mathematics.....Geometry and higher algebra.  
 4 Inorganic chemistry.....  
 2 Entomology.....  
 2 Systematic botany.....  
 2 English.....Lockwood's essays.  
 2 German or Latin.....  
 5 Botanical laboratory....  
 2 Analytical chemistry.....  
 3 Infantry drill.....

*Winter Term.*

- 4 Mathematics.....Geometry and higher algebra.  
 4 Inorganic chemistry.....  
 1 Systematic botany.....  
 2 Economic botany.....  
 2 English.....Lockwood's outlines general history and essays.  
 2 German or Latin.....  
 2 Book-keeping.....  
 2 Botanical laboratory....  
 5 Analytical chemistry....

*Spring Term.*

- 4 Mathematics.....Trigonometry and mensuration.  
 4 Organic chemistry.....  
 2 Viticulture and small fruits.  
 2 English.....Outlines general history and essays.  
 2 Surveying.....  
 2 German or Latin.....  
 2 Book-keeping.....  
 2 Vineyard.....  
 5 Analytical chemistry.....  
 2 Mechanical drawing.....  
 3 Infantry and artillery drill

## FOURTH YEAR—FIRST CLASS.

*Fall Term.*

- 3 Agricultural chemistry....  
 4 Fungi and plant diseases..  
 2 Forestry.....  
 2 Geology.....  
 2 English.....Literature and essays.  
 3 German or Latin.....  
 5 Analytical chemistry.....  
 3 Microscopic work in Fungi  
 1 Forestry..  
 3 Infantry drill.....



*Winter Term.*

2	Elementary mechanics ....	
2	Plant histology .....	
2	Plant Philosophy .....	
1	Horticultural economy and industries .....	
2	Geology .....	
2	English .....	Literature and essays.
3	German or Latin .....	
2	Experimental agriculture .....	
1	Lectures on military science .....	
2½	Analytical chemistry .....	
5½	Microscopic work in Fungi and plant histology ...	

*Spring Term.*

3	Elementary mechanics ...	
3	Horticulture and landscape gardening .....	
2	Horticultural economy and industries .....	
1	Lectures on English literature .....	
1	Astronomy .....	
3	German or Latin .....	
2	Civil government .....	
2½	Analytical chemistry ...	
4	Experiments in horticulture .....	
2½	Work in greenhouse .....	
3	Infantry and artillery drill .....	
	Graduation thesis .....	

## MECHANICAL COURSE.

## FIRST YEAR—FOURTH CLASS.

*Fall Term.*

5	Mathematics .....	Arithmetic.
5	English .....	Grammar, composition and declamation.
1	Zoology .....	
1	Botany .....	
2	Domestic animals .....	
3	Shop .....	Carpentry work.
3	Drawing .....	Free hand and penmanship.
5	Infantry drill .....	

*Winter Term.*

5	Mathematics .....	Arithmetic.
5	English .....	Grammar, composition and declamation.
1	Botany .....	
2	Domestic animals .....	
1	Elementary agriculture .....	
1	Zoology .....	
3	Shop .....	Carpentry work.
3	Drawing .....	Free hand and penmanship.

*Spring Term.*

5	Mathematics .....	Algebra.
5	English .....	History of Texas, composition and declamation
1	Zoology .....	
2	Botany .....	
1	Elementary agriculture...	
3	Shop .....	Carpentry work.
1½	Field work .....	
1½	Garden work .....	
1½	Drawing .....	Free hand and penmanship.
3	Infantry drill .....	

## SECOND YEAR—THIRD CLASS.

*Fall Term.*

5	Mathematics .....	Algebra.
4	Mechanism .....	
4	English .....	Grammar, rhetoric, composition and declamation.
3	Elementary physics .....	
3	Shop .....	Wood turning, blacksmithing, piping, bench work in iron.
2	Mechanical drawing .....	
1	Free hand drawing .....	
5	Infantry drill .....	

*Winter Term.*

5	Mathematics .....	Algebra and geometry.
5	Mechanism .....	
4	English .....	Grammar, rhetoric, composition and declamation.
2	Tactics .....	
3	Elementary Physics...	
3	Shop .....	Wood turning, blacksmithing, piping, bench work in iron.
3	Mechanical drawing .....	

*Spring Term.*

5	Mathematics .....	Algebra and geometry.
5	Steam engine .....	
4	English .....	U. S. History, composition and declamation.
2	Tactics .....	
3	Shop .....	Wood turning, blacksmithing, piping, bench work in iron.
3	Mechanical drawing .....	
3	Infantry drill .....	

## THIRD YEAR—SECOND CLASS.

For the Degree of Bachelor of Mechanical Engineering.

*Fall Term.*

2	Mathematics .....	Descriptive geometry.
4	Mathematics .....	Geometry and higher algebra.
4	Inorganic chemistry .....	
2	Steam engine .....	
2	English .....	Lockwood's and essays.
2	Heat and electricity .....	
5	Shop .....	Machine work in iron, higher work in blacksmithing.
2	Mechanical drawing .....	
3	Infantry drill .....	

*Winter Term.*

3	Mathematics . . . . .	Descriptive geometry.
4	Mathematics . . . . .	Geometry and higher algebra.
4	Inorganic chemistry . . . . .	
4	Steam engine . . . . .	
2	English . . . . .	Outlines general history and essays.
2	Electricity . . . . .	
5	Shop . . . . .	Machine work in iron and higher work in blacksmithing.
2	Drawing . . . . .	

*Spring Term.*

5	Mathematics . . . . .	Trigonometry and mensuration.
2	Water and water power . . . . .	
4	Organic chemistry . . . . .	
2	English . . . . .	Outlines general history and essays.
3	Surveying . . . . .	
5	Shop . . . . .	Machine work in iron and higher work in blacksmithing.
4	Drawing . . . . .	
	Field practice in surveying . . . . .	
3	Infantry and artillery drill . . . . .	

## FOURTH YEAR—FIRST CLASS.

*Fall Term.*

5	Mathematics . . . . .	Analytical geometry.
5	Valve motion and link work . . . . .	
2	Geology . . . . .	
2	Metallurgy . . . . .	
2	English . . . . .	Literature and essays.
4	Experimental work with steam engines and higher machine work . . . . .	
4	Mechanical drawing . . . . .	
3	Infantry drill . . . . .	

*Winter Term.*

3	Mathematics . . . . .	Analytical geometry.
2	Elementary mechanics . . . . .	
5	Indicator work and experiments . . . . .	
2	Geology . . . . .	
2	English . . . . .	Literature and essays.
1	Lectures on military science . . . . .	
4	Experimental work with steam engine, testing machine . . . . .	
2	Metallurgy . . . . .	
4	Mechanical drawing . . . . .	

*Spring Term.*

3	Elementary mechanics . . . . .
5	Experimental work with steam engine; lectures . . . . .
1	Astronomy . . . . .
3	Metallurgy . . . . .
2	Civil government . . . . .

- 1 Lectures on English literature.....
- 5 Experimental work with steam engine and higher machine work.....
- 2½ Mechanical drawing.....
- 3 Infantry drill .. .. .
- Graduation thesis.....

## THIRD YEAR—SECOND CLASS.

(For the degree of Bachelor of Civil Engineering.)

*Fall Term.*

- 2 Mathematics.....Descriptive geometry.
- 4 Mathematics.....Geometry and higher algebra.
- 4 Inorganic chemistry.....
- 2 Graphic statistics.....
- 2 English... ..Lockwood's.
- 2 German or Spanish.....
- 5 Shop.....Machine work in iron and higher work in blacksmithing.
- 2 Drawing.....
- 3 Infantry drill.....

*Winter Term.*

- 2 Mathematics... ..Descriptive geometry.
- 4 Mathematics.....Geometry and higher algebra.
- 4 Inorganic chemistry .....
- 2 Electricity.....
- 2 Road making.....
- 2 Outlines general history and essays.....
- 2 German or Spanish.....
- 5 Shop.....Machine work in iron and higher blacksmithing.
- 2 Drawing.....

*Spring Term.*

- 5 Mathematics.....Trigonometry and mensuration.
- 4 Organic chemistry.....
- 2 Outlines general history...
- 3 Surveying.....
- 2 German or Spanish.....
- 5 Practice.....Machine work in iron, higher work in blacksmithing and field work in surveying.
- 4 Mechanical drawing.....
- 3 Infantry and artillery drill.

## FOURTH YEAR—FIRST CLASS.

*Fall Term.*

- 5 Mathematics.....Analytical geometry.
- 4 Topographical surveying and railroad engineering.....
- 2 Geology.....
- 3 German or Spanish.....
- 2 English.....Literature and essays.
- 5 Practice.....Field work.
- 5 Mechanical drawing.....
- 3 Infantry drill.....

*Winter Term.*

3	Mathematics.....	Analytical geometry.
2	Elementary mechanics....	
5	Stresses in bridges and roofs and lectures on strength of material....	
2	Geology.....	
3	German or Spanish.....	
2	English.....	Literature and essays.
1	Lectures on military sci- ence.....	
4	Practice.....	Field work and use of testing machine.
5	Mechanical drawing.....	

*Spring Term.*

3	Elementary mechanics....	
5	Stresses in bridges and roof designing.....	
2	Civil government.....	
1	Astronomy.....	
3	German or Spanish.....	
1	Lectures on English liter- ature.....	
5	Practice.....	Work with testing machine, designing and field work.
5	Mechanical drawing.....	
3	Infantry and artillery drill.	
	Graduation thesis.....	

## SCHEDULE OF RECITATIONS.

In order to show definitely the manner in which the time of students is employed, the following schedule of daily work is appended.

Studies falling in the same hour are in different courses. Instructive work in the shops, fields, garden, laboratories, or creamery, is in this schedule designated as "practice." The larger classes are, as necessity may arise, divided into sections which may recite or work in the several departments at the same time under different instructors.



Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
FIRST CLASS.	<p>9-10 Mathematics. 10-11 Astronomy. 11-12 Mechanical or Civil Engineer'g. 12-1 Agriculture or Horticulture. 2-3 Practice. 3-4 2-5 9-4 5</p>	<p>Governmental Science. Mathematics. Physiology. Agriculture or Veterinary. Spanish. German.</p>	<p>Mathematics. Astronomy. Mechanical or Civil Engineer'g. Agriculture or Horticulture. Practice. Drill.</p>	<p>Governmental Science. English. Physiology. Agriculture or Veterinary. Spanish. German.</p>	<p>Mathematics. Astronomy. Mechanical or Civil Engineer'g. Agriculture or Horticulture. Drawing or Practice. Drill.</p>
SECOND CLASS.	<p>Mechanics. 9-10 10-11 Chemistry. 11-12 Agriculture. 12-1 English. 3-4 2-5 2-4 5</p>	<p>German. Business Law. Chemistry. Agriculture. Spanish. Horticulture. Bookkeeping.</p>	<p>Mechanics. Chemistry. Engineering. English. Practice. Drill</p>	<p>German. Business Law. Chemistry. Agriculture. Spanish. Horticulture. Bookkeeping.</p>	<p>Mechanics. Chemistry. Engineering. Drawing. Drill.</p>
THIRD CLASS.	<p>Mechanical Drawing. 8-10 10-11 Mechanics. 11-12 Mathematics. 12-1 Physics. 2-3 Horticulture. 2-3 English. 2-5 5</p>	<p>Mechanics. Mathematics. Agriculture. English. Practice.</p>	<p>Mechanics. Mathematics. Horticulture. English. Drill.</p>	<p>Free hand Drawing. Mechanics. Mathematics. Physics. Horticulture. Practice.</p>	<p>Mechanics. Mathematics. Physics. Agriculture. English. Drill.</p>
FOURTH CLASS.	<p>Practice. 8-10 9-10 Horticulture. 11-12 Mathematics. 12-1 English. 3-4 5</p>	<p>Drawing. Horticulture. Mathematics. English.</p>	<p>Agriculture. Mathematics. English. Drill.</p>	<p>Practice. Horticulture. Mathematics. English.</p>	<p>Practice. Horticulture. Mathematics. English. Drill.</p>

## POST GRADUATE COURSES.

The Post Graduate degree of M. S. (Master of Science) is given to those who have pursued the post graduate studies for two years, and have passed satisfactory examinations thereon and submitted an approved thesis.

It is required for admission to study for this degree that the candidate be a graduate in one of the courses, or pass satisfactory examinations upon subjects embraced in them.

Students for this degree are under the general regulations of the College, but are not subjected to military discipline; they may, however, be required to assist in keeping order in the barracks.

A student desiring to enter for this degree must select his course of study from prescribed subjects. This selection must be submitted to and approved by the faculty, and no change can be made without approval of the faculty.

## SPECIAL COURSES.

Each of these courses is intended to be short and eminently practical, and is not open to any student who may wish to enter it merely as a means of getting through with his education in as short a time as possible. They are for mature young men who may desire instruction in the principles involved in the occupations to which these courses apply; young men who may have already received sufficient general elementary training to enable them to take up and pursue technical study in these occupations. Admission to the short courses will therefore be strictly at the discretion of the faculty.

Those who may wish to take these courses should correspond with the President of the College.

Academic requirements for admission are same as for the fourth class, and the student must be eighteen years of age.

Students may apply for these courses at any time, but students taking special course in chemistry or horticulture will be admitted only during the fall term. Students in these courses will have the privilege of pursuing any studies in the regular courses, the selection of studies to be approved by the faculty.

Special courses in the following subjects are provided: Agriculture, horticulture, dairying, carpentry, blacksmithing, machinery, chemistry, drawing, surveying.

## GOVERNMENT OF THE COLLEGE.

The government of the College is vested in a Board of Directors, consisting of five members, appointed by the Governor, and in a faculty selected by the Board of Directors.

## BOARD OF DIRECTORS.

Major A. J. Rose, President... Salado.  
 W. R. Cavitt.... Bryan.  
 L. L. Foster, ex-officio..... Austin.  
 J. D. Fields..... Manor.  
 John Adriance..... Columbia.

## FACULTY.

L. S. Ross, president.  
 W. L. Bringham, Ph. D., vice-president and professor of English.  
 Rudolph Wipprecht, professor of languages.  
 R. H. Whitlock, M. E., professor of mechanical engineering.  
 Geo. W. Curtis, M. S. A., professor of agriculture and director of experiment station.  
 H. H. Harrington, M. S., professor of chemistry and mineralogy.  
 Charles Puryear, M. A., C. E., professor of mathematics.  
 Lieut. Benj. C. Morse, Twenty-third infantry U. S. A., professor of military science and commandant.  
 F. E. Giesecke, M. S., associate professor of drawing  
 Mark Francis, D. V. M., associate professor of veterinary medicine.  
 S. A. Beach, B. S. A., professor of horticulture and botany.  
 Robt. F. Smith, adjunct professor of mathematics.  
 W. B. Philpott, M. S., assistant professor of English.  
 P. S. Tilson, assistant professor of chemistry and mineralogy.  
 A. M. Guenther, assistant professor of mechanical engineering.  
 S. M. Carson, assistant professor of agriculture.  
 H. Ness, assistant professor of horticulture and botany.

## OTHER OFFICERS.

T. C. Bittle, chaplain and librarian.  
 J. D. Read, surgeon.  
 E. W. Hutchinson, book-keeper.  
 B. Sbisá, steward.  
 C. A. Lewis, foreman of the carpenter shop.  
 J. H. Alsworth, foreman of the farm.  
 G. E. Eberspaacher, foreman of the garden.  
 C. E. Barnette, foreman of the orchard and vineyard.  
 J. B. Watts, foreman of the stock.  
 J. S. Fowlkes, Bryan, fiscal agent.

The professors of agriculture, horticulture, chemistry, veterinary science, and physics, and their assistants help also in the work of the experiment station.

## . ATTENDANCE.

During the session of '89 and '90, 279 students matriculated. Two hundred and eighty-three have been enrolled during the present session. There are 100 now in the fourth class, which is common to both courses. In the third, second, and first classes there are fifty-nine students taking the agricultural course and 111 the mechanical course. The four classes contain 270 students.

## FARMER'S INSTITUTES.

There is no means by which the College can be rendered more immediately useful to the agricultural classes than by holding Farmer's institutes in different portions of the State.



This brings the professors in direct contact with intelligent and progressive farmers and is of mutual advantage. These institutes, which were inaugurated within less than two years, have been held in different parts of the State. Our professors have attended them closely, and by participation in the work of the institutes, have accomplished much good.

#### LABOR FUND.

It is the policy of the College to require from six to ten hours per week of practical work from each student and that this work shall be instructive. It is difficult, in some departments, to distinguish between instructive and non-instructive labor. The most successful agricultural colleges have, to some extent, solved this problem by providing a labor fund from which students are paid for all productive labor. I am constantly in receipt of letters from young men in our State who desire to labor in order to defray their college expenses. If a labor fund is provided, the State, in addition to enabling deserving young men to acquire a sound, practical education, would receive some return in the cultivation of the College farm, garden and orchard, the care of stock, and the improvement and adornment of the campus. It is much better for the student to assist him by enabling him to help himself than by giving free scholarship, even if the scholarship should always be awarded to the most deserving. I respectfully recommend that the Legislature be asked to make an appropriation for this purpose.

#### DEPARTMENTS OF THE COLLEGE.

These consist of the departments of agriculture, mechanical engineering, horticulture and botany, civil engineering and physics, veterinary science, chemistry and mineralogy, drawing, mathematics, English and history, language, and military science. I have already indicated to you some wants of these departments and you will find matters of interest in the reports of their several heads.

#### LIBRARY AND READING ROOM.

This contains about 3700 volumes and extensive list of papers and periodicals of all sorts. The importance of a well selected library as a factor in the education of young men cannot be over estimated. A large number of agricultural and scientific papers, as well as several of our State papers, have been contributed to the reading room or furnished at reduced

rates. A library should continue to grow, keeping pace with the times, and a suitable appropriation is suggested.

#### MUSEUM.

The College museum was inaugurated about three years ago. It is a valuable adjunct to instruction, and a small sum judiciously expended each year will soon make it an important addition to our facilities for promoting industrial education.

#### REQUISITES OF ADMISSION.

To enter the College an applicant must have attained his fifteenth year, or at least must have acquired a degree of physical and mental advancement corresponding to that age. He must be free from contagious or infectious disease, or any deformity that would unfit him for the performance of his duties as a student of this College. He may be required to furnish evidence that he has not been dismissed from another institution of learning and that his moral character is good.

The mental attainments necessary for entering on the course of study comprise a fair knowledge of arithmetic as far as proportion, of descriptive geography and of elementary English grammar and composition.

#### EXPENSES FOR SESSION OF NINE MONTHS.

Trust fund.....	\$ 5 00
Medical fee.....	5 00
Incidental fee.....	10 00
Maintenance fall term.....	50 00
Maintenance winter term..	35 00
Maintenance spring term..	40 00
	-----
	\$145 00

The trust fund will be returned if the student is charged with no damage to College property. Incidental and physicians' fees are payable on entrance, and cannot be refunded. Maintenance includes board, fuel, washing, lights, room rent, bedsteads, mattresses, pillows, tables, wash stands, chairs, wardrobes, buckets, basins, etc., all of which the College furnishes.

#### LIGHTS.

The College is now lighted by electricity, supplied by the Electric Light company of Bryan. The light is immeasurably superior to the gas light, which we have used for several years.

#### UNIFORMS, BOOKS AND STATIONERY.

A neat uniform of cadet gray cloth is furnished here at a cost of \$18. These uniforms are made by contract, and students

are required to purchase from the contract tailor in order that uniformity may be secured in the cut and quality of the clothing, and that parents may be protected from imposition by irresponsible persons.

Books and stationery are obtained at the College book store. They cost about \$5 to \$15 per session.

#### FINANCIAL AFFAIRS.

The State receives from United States land grants for this College 180,000 acres of land scrip; the scrip was sold in 1871 at 84 cents per acre, and the proceeds invested in 7 per cent State bonds. The amount realized from sale of scrip was \$156,000 and the amount purchased amounted to \$174,000. In 1876, \$35,000 with accumulated interest was invested in 6 per cent State bonds. This now forms the permanent endowment of the College. By the conditions of the land grant and the laws of the State, the interest alone of this fund is available, and that only for the pay of professors and officers of the College.

Bonds.	Rate.	Interest.
\$174,000	....at 7 per cent....	\$12,180 00
35,000	....at 6 per cent....	2,100 00
Total annual interest.....		\$14,280 00

#### SALARIES OF PROFESSORS AND OFFICERS.

The following are the salaries now paid from College funds to the several several officers named:

President.....	\$3,500
Three professors at \$2,250.....	6,750
One professor at \$2,000. . . . .	2,000
One professor at \$1,500.....	1,500
One professor at \$1,000.....	1,000
Two assistant professors at \$1,000 . . .	2,000
One adjunct professor at \$1,000.....	1,000
Five assistants.....	1,800
Chaplain.....	900
Steward.....	1,800
Foreman carpenter shop.....	800
Foreman machine shop.....	800
Foreman garden.....	500
Foreman vineyard and orchard.....	360
Foreman farm.....	800
Stockman.....	500
Janitor.....	1,000
Book-keeper.....	240
<hr/>	
From interest on endowment.....	\$27,250
	14,495
Amount from State appropriation..	\$12,755

## MAINTENANCE.

This account is charged with all supplies bought, pay of janitors, laundry, fuel, lights, and other expenses incidental to the maintenance of the students. It is credited with amount received from students for their maintenance, board of officers and employes and all supplies bought by professors and officers of the College from the steward.

Total receipts for '88 and '89.....	\$23,012 09	
Total expenditures for '88 and '89.	25,847 44	
	<hr/>	
Leaving balance... ..		\$2,164 65
Total receipts for '89 and '90.....	\$32,063 26	
Total expenditures for '89 and '90.	31,445 43	
	<hr/>	
		\$617 83

## GENERAL STATEMENT.

*Receipts ('88 and '89).*

By balance June 1, '88.....	\$ 6,808 44	
By receipts No. 1—900, June 1, '89	90,685 62	
	<hr/>	
		\$97,494 06

*Disbursements ('88 and '89).*

To warrants paid No. 1—1,439....	\$96,548 93	
To balance .. .. .	945 13	
	<hr/>	
		\$97,494 06

*Receipts ('89 and '90).*

By balance ('88 and '89).....	\$ 945 13	
By receipts No. 1—926.....	82,012 65	
To balance.....	3,288 40	
	<hr/>	
		\$86,246 18

*Disbursements.*

To warrants paid No. 1—1,349....	\$86,246 18	
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All of which is respectfully submitted.

W. L. BRINGHURST,  
Vice President.



## DEPARTMENT OF MATHEMATICS.

To *W. L. Bringham*, Vice President State A. & M. College :

SIR—I have the honor to submit the following report for the Department of Mathematics :

I assumed the duties of the chair at the beginning of the present session.

The course in mathematics extends through all four years of the College curriculum. The subjects taught are as follows :

*Fourth Class*—Arithmetic, Algebra begun; 5 recitations per week.

*Third Class*—Algebra continued, Geometry begun; 5 recitations per week.

*Second Class*—Advanced Algebra, Geometry finished, Trigonometry; 4 recitations per week.

*First Class*—Analytical Geometry, Elementary Mechanics, Calculus; 5 recitations per week.

There is one graduate student in the department studying for the degree of Bachelor of Science.

On account of lack of preparation of a large number of the applicants for admission to the fourth class, the course of study is not as advanced as is desired. It is my purpose, from year to year, to increase the requirements for admission, keeping pace with the improvement in the facilities for instruction in the preparatory schools of the State, and thus, in a few years, to offer a course in mathematics that will better meet the requirements of students in engineering and other applied sciences than is now possible.

I am, sir, with great respect, your obedient servant,

CHARLES PURYEAR,

Professor of Mathematics.

College Station, Texas, Dec. 6, 1890.

## REPORT OF THE DEPARTMENT OF ENGLISH AND HISTORY.

COLLEGE STATION, TEXAS, DEC. 12, 1890.

*Major A. J. Rose, President of Board of Directors of A. & M. College:*

SIR—I have the honor to say for the Department of English that it has accomplished and is accomplishing the usual amount of work. The aim of the department is to make thorough, practical English scholars. The course of instruction includes Grammar, Composition, Declamation, Rhetoric, History of Texas, History of the United States, General History, Literature, Essays, Lectures, etc. Much of the success attained and progress made in the department is due to the ability and faithful co-operation of the assistants, Prof. W. B. Philpott and Rev. T. C. Bittle.

Very respectfully,

W. L. BRINGHURST,  
Professor of English and History.

## REPORT OF AGRICULTURAL DEPARTMENT AND EXPERIMENT STATION, A. & M. COLLEGE.

COLLEGE STATION, TEXAS, {  
December 1, 1890. }

*Major W. L. Bringham, Acting President:*

SIR—In response to your official request, I take pleasure in handing you herewith, for transmission to the Honorable Board of Directors, a brief report, covering the present condition of the Agricultural Department: work accomplished since last biennial report, and needs of the department for further advance and more progressive work in the immediate future.

### ACADEMIC WORK.

Since my connection with the College, now nearly eight years, it has been a constant aim to increase the effectiveness of the Agricultural Department, and thus, if possible, popularize the agricultural course. That some measure of success has been attended is evidenced by the steady increase in the number of students taking the course in agriculture through successive years, as noted in previous annual and biennial reports from this department. I am gratified to report that at no time has this increase been more marked than during the two years just past, there being enrolled for the present session in the agricultural course: first class, four; second class, fifteen; third class, forty; making a total of fifty-nine students taking this course in the three upper classes alone, as against thirty-two students, session 1888-9, and twenty-one, session 1886-7. In addition to the number stated as taking the agricultural course in this department, instruction has been given the entire fourth class, numbering ninety-four men. It will be understood that all students in the fourth class take the same studies, not choosing between the courses until prior to entering the third class at the close of the first year's work. In this manner our fourth class work serves as preparatory to the main work of both the agricultural and mechanical courses, and students are thus given full opportunity to examine the two courses before deciding between them. Instruction has been given in accordance with curriculum adopted by the faculty, and approved by the Board of Directors, briefly outlined as follows:

## FIRST YEAR—FOURTH CLASS.

Members of this class take up the study of domestic animals—origin, history, description, merits, objections, etc., of each of the different breeds of horses, cattle, sheep and swine, with suggestions on care and management, supplemented by examination and discussion of stock owned by the College. In this work it is desired to give the student a fairly accurate judgment as to the different breeds and best types of each, with such practical points as may be briefly presented regarding care and management, and points of merit or objectionable features to aid in selection. This class also pursues the study of elementary agriculture, supplementing their work in the class room by field tests with different crops and fertilizers in a field set apart for this purpose.

## SECOND YEAR—THIRD CLASS.

Members of this class take up the study of dairying, including selection of milk stock, followed by the study of the principles of stock breeding. Third class men do the entire work in the creamery, so far as their time will allow, under the direction of the professor or assistant, during the winter and spring terms.

## THIRD YEAR—SECOND CLASS.

Members of this class pursue the study of cattle feeding during the entire year. The second class men have practice in the creamery during the fall term, and practice in cattle feeding during the winter and spring terms.

## FOURTH YEAR—FIRST CLASS.

Students in this class pursue the following studies: Fall term, farm drainage; winter term, fertilizers; spring term, farm management—the whole supplemented by such practice as will best aid in the studies pursued.

## SELECTED STUDIES.

In addition to the regular course, a few older students are permitted to take select studies in the course, in order that they may better fit themselves for any special line of work in a shorter time than would be possible should they pursue the full course.

## CREAMERY INSTRUCTION.

In the regular work an especial interest has been shown in creamery practice; and I may confidently state that the work



in this important line adds much of real value to the agricultural course. The dairy interests of our State are rapidly growing in importance, and the College should meet this growth with increased facilities for instruction. I am specially desirous of adding to our creamery a complete equipment for the manufacture of cheese. To perfect this, with additional room necessary, will require an appropriation of \$1,200.

#### STOCK.

The stock of dairy cattle owned by the College, I am glad to say, is in excellent condition, and compares favorably in quality with the herds belonging to any other institutions of the kind which it has been my pleasure to visit. Our stock of hogs, now numbering about ninety head, is also in good shape. In my opinion, it would be a great advantage financially and educationally to increase the number of registered animals of the main breeds now carried in cattle and hogs, and begin also to do something with sheep and horses. The wool interests, especially, are of vast importance in our State, and we should do no less than recognize this fact by securing, at least, a small flock of pure bred animals as a basis for educational and experimental work in the near future. Without urging any definite amount in appropriation for this purpose, I may simply state that, in my opinion, \$5,000 can be used to advantage at the present time in increasing the number of pure bred animals belonging to the College and making necessary accommodations.

#### WATER SUPPLY.

Our water supply is lamentably insufficient, and what we have is by no means of the best character. I would again call attention to the imperative need for artesian, or, at least, inexhaustible, deep well water. It is really a matter of surprise to me that we have been able to keep our stock in even fairly good health, as we have done, without more abundant and better water supply. \$5,000 should be sufficient for this purpose.

#### STUDENT LABOR.

The appropriation for student labor to the Agricultural Department as now made, is insufficient; and I would again advise that at least \$500 be placed at the disposal of the Agricultural Department for the payment of unproductive student labor. I would further advise that the maximum rate allowed

be raised from 10c, as fixed at present, to 15c per hour, for the following reasons:

First, Such price is not more than just to our most efficient student workers, and second, the present difference between the maximum rate allowed for student labor in the Agricultural Department 10 cents per hour, and that allowed in the Mechanical Department, 20 cents per hour, is a difference which I cannot conceive should exist, and must, if continued, eventually prove more or less burdensome, and, therefore, a check to rapid progress in developing the agricultural course. There can be no doubt of the advisability of encouraging, even urging, students to pay a portion of their college expenses by manual labor; and, as it is known and admitted that such labor is employed at greater or less loss to the College on account of its short period or transient character, it should be paid for by special appropriation rather than from department funds. I am glad to state that among the young men who engage in manual labor at this institution may be found those who stand well up toward the heads of their respective classes. They furnish a standard of manly independence and genuine worth of which any institution may well be proud.

#### THE FARM.

The College farm, I may say in brief, has been gradually improving in many respects. Practically, all the land belonging to the College is now under fence, and we are grading and maintaining a system of farm roads, which will not only add in attractiveness, but in convenience as well.

The present year, all crops, with the exception of cotton, were cut short by the early drouth; even cotton suffered somewhat, but not seriously. The corn crop was extremely short, and the high prices prevailing on account of the grain failure throughout the West, will be felt this winter to a certain extent as a drain on department funds.

#### {HOUSE FOR FARM WORKMEN.

A very great difficulty on the farm has been found in the matter of regular labor. We are compelled to hire single men for lack of suitable house accommodation for men with families, and here again, we are without suitable shelter for single men. The house now occupied by workmen is old and positively unsafe for habitation, to say nothing of its unsightly appearance and great discomfort to the men in cold weather. We must have a place close to the barns for men who work

with the stock. In my opinion, it will be best to build a substantial, neat, commodious house near at hand, so arranged as to accommodate one man with family, and provide neat and comfortable rooms for single men engaged in the department. In this way the rooms could be kept in order, and we should be better able to retain good men as workmen.

A suitable house of this kind can be erected at a cost of \$1,800.00.

#### EXPERIMENT STATION.

The annual report of the Texas Experiment Station for 1890 will be issued in January next, in bulletin form, with an index to all bulletins published during the year, and, together with these bulletins, will furnish a complete and detailed report regarding the work of the Experiment Station.

The several departments are well equipped for work, and much good has already been accomplished. During the year four bulletins have already been issued; two from the agricultural department, one from the horticultural department, and one from the veterinary department—numbers 9 to 12. Number 13, from the chemical department, is nearly ready for issue. The main lines, which have engaged our attention during the year, are dairy work—including effect of the different foods, especially cotton seed and cotton seed meal, on yield and quality of butter, temperature and conditions for churning as dependent on different foods and methods of creaming milk; cattle and hog feeding—especially with reference to the best possible use of cotton seed and cotton seed meal and hulls for profit, and the best methods of growing, keeping and feeding ensilage; fertilizer tests with field and garden crops variety tests with field, orchard and garden varieties; investigation of cotton blight, or root rot disease; determination of digestibility of Southern food product; analysis of food stuffs, fertilizers and dairy product, tile drainage, diseases of livestock—methods of curing and prevention, especially the so called "Texas Cattle Fever," which this station has been carrying in connection with the Missouri Experiment Station; boll and leaf worm pests of cotton, weevil in corn, and other matters of less immediate importance.

It has been our aim to establish branch stations in such sections of the State as will best secure representative soil and climatic conditions. Through the kindness of officers in charge of these institutions experiments have been started on the State farms at Gatesville, Coryell county, and Harlem, Fort Bend county, also at Prairie View, Waller county, where the

colored branch of the A. & M. College is located. During the present year a branch has been established on the grounds of the State Grange Fair Association at McGregor, McLennan county—the association kindly offering as much land as we may need for this purpose free of charge.

By means of branch stations we shall be able to cover a great variety of soil and climatic conditions, and thus make our experiments of more direct value to the farmers in different portions of the State than would be possible through the central station alone. So far as we have advanced in this matter it has been at slight expense, for the reason that all the land and nearly all the labor has been furnished gratis. To establish a branch station on any other basis will require a definite appropriation for that particular purpose. I am of the opinion that such a branch should be established at some point in the great black waxy belt of North Texas, and for this would recommend that a biennial appropriation of \$5000 be asked from the State Legislature to supplement the United States appropriation to the Texas Experiment Station already available.

In conclusion it gives me pleasure to bear testimony to the efficient and courteous manner in which my assistants, foremen, and stenographer have performed their respective duties.

Respectfully submitted,

GEO. W. CURTIS,  
Professor of Agriculture and Director of Experiment Station.



## BIENNIAL REPORT OF THE DEPARTMENT OF MECHANICAL ENGINEERING.

*W. L. Bringham, Acting President:*

SIR—Since making the last biennial report for the department of Mechanical Engineering there have been no additions made to the equipment, with the exception of small tools which have been bought at odd intervals and generally only such as were needed to fill the places of those worn out in service or lost. The general methods of imparting instruction are similar to those formerly used, although occasionally minor details have been changed as necessity or good practice demanded. Thus in the shops individual instruction is given to each one so that a few poor workmen in a class will not be able to hold back those who are skillful enough in that particular work to proceed.

In the class room this method of instruction is of course impracticable to a certain extent, but even there it has always been the object to make the work as practical as possible and bearing as much as possible on the everyday problems to be met with by the practical engineer. The basis of work in the class room here, as in all similar work, is text book and lecture. Both are aided as far as possible by models and such actual machines as may be used to advantage. For models of this kind the department is especially indebted to the Westinghouse Air Brake company, of Pittsburg, and L. Schutte & Co., of Philadelphia. Practical working drawings are used wherever possible instead of pictures, with a view of giving the student a chance to study practical methods of representing the machine which they have under consideration.

As shown in the last annual report the equipment of the department is beginning to become inadequate for the accommodation of the increasing numbers in the classes. This applies principally to the machine and blacksmith-shop equipments. And for this reason I would repeat that there is need of more machine tools and an increase in the number of forges. For this purpose two thousand dollars (\$2000) could be used to good advantage and would relieve the department of the pressure which now threatens. The building containing these two shops is in good condition and has sufficient room for the increase in equipment in addition to that already there. But the present carpenter shop will have to be replaced at an early

date by a new building. The present building was constructed in a hurried manner for a purpose entirely foreign to its present use. Being intended for barracks it was made with many partitions, and in removing these in order to make large rooms for shop use the whole building was weakened, and now it is almost ready to give way entirely.

After consultation with the professor of drawing it was decided to recommend that a new two-story brick building be erected and made a part of the present machine shop, the lower floor to be occupied as a carpenter shop and the upper by the drawing department. The building should be made in such a manner that it shall be symmetrical in itself, but will admit of future additions without detriment to the general harmony of its appearance. In order to do this and make it of sufficient size a sum of from ten thousand to fifteen thousand dollars (\$10,000 to \$15,000) will be needed.

The question of student labor is no longer an experiment and has proved itself a great success in this department.

This is shown by the fact that a great deal of the outside work for which the department is generally responsible has been performed by students desiring to help themselves along in the expenses of their course, and thus the assistants have been enabled to spend their time to the best advantage on that part of the work which required the most skill.

Thus, taking everything into consideration, the past two years have shown an improvement over the preceding ones as far as may be judged by one engaged in the work.

Yours very truly,

R. H. WHITLOCK,  
Professor of Mechanical Engineering.

## DEPARTMENT OF VETERINARY SCIENCE.

A. & M. COLLEGE OF TEXAS, }  
December 8, 1890. }

*Prof. W. L. Bringham, Vice President:*

SIR—I have the honor to submit the following report of the Department of Veterinary Science:

The work in this department, as stated in the Annual Catalogue, is being carried out as well as circumstances permit. The department is in good, vigorous condition throughout. I desire to call your attention to the cramped and otherwise unsuitable quarters occupied by this department, to the absence of experimental grounds and the lack of facilities for instruction in zoology. In order to make the department what it should be, the following should be provided:

1. A public clinic for the treatment of sick or disabled animals from a distance should be opened at once. This has been decided upon, and circulars have been prepared which are almost ready for distribution, the object of such clinic being to give our students practice in diagnosing and treating diseased animals, also to create more interest in our college and its work among the farmers and stockmen of this portion of the country

2. A special veterinary hospital and laboratory should be provided separate from the main building. This building should be two stories high, and contain both open and box stalls, dissecting room, pharmacy, museum and suitable cages for cats, dogs, rabbits, birds, fishes, reptiles, etc. It should also contain a lecture room with raised seats, and so arranged that horses and other large animals can be presented to the classes. It should also contain the veterinary laboratory of the experiment station with all its apparatus. There should also be a forge and a bone builer with hoods, etc. The necessity for such a building entirely separate from the main building of the College is obvious.

3. There should be experimental grounds laid off in a suitable location, and provided with shelter, water, etc., for not only the experiment station, but also for animals receiving medical treatment, and such clinical patients as may come from a distance.

The above are the imperative needs of the department at present.

I take pleasure in reporting an increased interest taken by the students in every branch of work in this department.

Respectfully submitted.

M. FRANCIS,  
Veterinary Surgeon.

## DEPARTMENT OF HORTICULTURE AND BOTANY.

W. L. Bringham, Vice President A. & M. College:

SIR—In accordance with your request, I have the honor to submit the following statement for the Department of Horticulture and Botany :

One term has nearly elapsed since entering upon the duties of this department. During this time instruction has been given to all students in the Agricultural and Horticultural courses and also to some special students, the number enrolled for each subject being :

First class in Forestry...	4
Second class in Entomology.....	14
Second class in Botany.....	2
Third class in Large Fruit Culture...	44
Special class in Essentials of Botany.	4
<hr/>	
Total (less two counted twice)....	66

During the succeeding term instruction will be given to the above mentioned classes and also to the entire fourth class—numbering about ninety members—which will pursue the study of Elementary Botany. The whole number of students under instruction during the year will, therefore, be about one hundred and fifty.

### BOTANY.

The botanical work required in the *Mechanical* and *Civil Engineering* courses consists of the study of Elementary Botany in the second and third terms of the first year.

In the *Agricultural* course, the first year work is identical with that of the Engineering students. Botany is not resumed till the second term of the third year, when the subject of Economic Botany is presented, and the botanical work of the course is completed with the study of Plant Histology in the second term of the fourth year.

The botanical work of the Horticultural course includes that required for the degree of B. S. A., and in addition to this Systematic Botany is taught during the first and second terms of the third year, Fungi and Plant Diseases during the first term, fourth year, and Plant Physiology during the second term, fourth year.

The advantages for instructing the present number of students, either in the class room or laboratory, are meager.



## MICROSCOPES.

The five compound microscopes belonging to the department are insufficient in number to meet the present demands for students' laboratory work. The outlook assures an immediate rapid increase in the number of students requiring the use of compound microscopes in Histological, Physiological and Cryptogamic Botany and in Entomological study. An addition of five or six microscopes is really imperative.

It is also proper to state that none of the instruments on hand are properly furnished for original research. It needs no argument to prove that the laboratory should be supplied with at least one microscope well equipped with high power objectives and first class micrometer and camera lucida.

In view of the brief botanical course of the Engineering students, and of the usual delay of students in supplying themselves with necessary hand lenses, it is suggested that the College purchase one hundred hand lenses and loan them on deposit to the fourth class students. This plan would reduce the expenses of the students and insure more uniform work in class.

## HERBARIUM.

The herbarium at present consists of about eight hundred unmounted specimens. Considering that some Agricultural Colleges have in a single year added more than four times this number of mounted specimens to their herbariums, this can not be called a good showing for our College. As much time as can properly be spared from other duties of the department will be devoted to mounting, leveling and arranging the material on hand and in adding to the herbarium by collecting and by exchanging for new specimens. One hundred dollars per year would be none too much to place the herbarium where it will be a credit to the College. A small herbarium case has recently been placed in the laboratory for the proper protection and arrangement of existing specimens.

## CHARTS.

Charts for illustrating vegetable reproduction, structure and growth would be a valuable adjunct to class room work. The library has some standard popular works on botanical and kindred subjects. The department should be furnished with a few recent technical works.

## HORTICULTURE.

The instruction in Horticulture begins with the last term of

the first year. Students of all courses in that class are given garden work one and a half hour per week.

In the *Agricultural* course Large Fruit culture is presented in the first and second terms of the second year, and in the third term Gardening is taught. Instruction by text book and lectures is accompanied with practice in general nursery work, care of orchards, vineyards and garden, and in becoming familiar with the native and exotic trees and shrubs of campus, arboretum and forests.

The horticultural student is given the same work as the agricultural student, and also takes grape and small fruit culture in the spring term of the third year. In the fourth year he also takes horticultural economy and industries, floriculture and landscape gardening with experiments in horticulture and greenhouse practice.

The advantages for horticultural instruction are in pleasing contrast with the meager equipment for botanical work.

The orchards of mostly young trees furnish ample illustration of the important principles governing the training and treatment of fruit trees. Here are found numerous varieties of the peach, plum, apricot, pear, apple, crab apple, cherry, fig, Japanese persimmon—also vineyards of choice grapes and plats of small fruits.

In the arboretum are being placed trees of every clime, to test their adaptability to Texas soil and climate, while similar work is being done on the campus and in the nursery. A good collection of green house plants and the work of the vegetable garden and propagating beds furnish constant and valuable object lessons.

A detailed account of the horticultural experiments will be found in the bulletins of the experiment station.

#### NEEDS OF THE HORTICULTURAL DEPARTMENT.

The most pressing need of this department is a proper heating apparatus for the green house. The present device of heating by hot air tubes is faulty in the extreme. At times the gardener has been obliged to remain up all night attending to the furnace to keep the temperature above freezing point. It is recommended that the present furnace be replaced by a suitable hot water system.

The present green house is not high enough to accommodate tall plants and its capacity is much crowded. An addition suitable for accommodating large plants would allow a part of the present green house to be appropriated for a much needed

propagating bench with bottom heat; at the same time the capacity of the graft room could be doubled so as to furnish room for instructing at least a small class of students, and also a room be arranged in the same building where the teamster could lodge. The present room covers the rear entrance to the green house. It is used partly for storage and cannot conveniently accommodate more than two workmen at once.

#### FORESTRY.

This subject is presented to the students of the agricultural and horticultural courses in the fall term of the senior year. Practice is required in identifying the varieties of trees found in the arboretum and native forests, and in study of the microscopic structure of woods. A good collection of the woods of Texas and Florida is being placed in position in the museum. It is proposed to enlarge this exhibit as rapidly as possible.

#### CAMPUS.

The avenues and drives of the campus are in good condition. A few much needed walks will soon be laid in various places.

Many of the recently planted trees and shrubs are making satisfactory growth. The needs of this department are well provided for.

#### ENTOMOLOGY.

This subject has been assigned to the department of horticulture and botany. It is taught in the fall term of the second class. A small collection of insects in the museum furnishes illustrations of a few species in nearly all insect orders. It numbers about 900 specimens, many of which are duplicates. This collection is being constantly increased. A dozen scalpels and other conveniences for dissection and laboratory work are much needed.

#### RECAPITULATION.

In closing allow me to recapitulate briefly the needs of the work in this department:

- |                           |   |       |
|---------------------------|---|-------|
| 1. Botanical Dep't.....   | Five Students' Compound microscopes, one Professional microscope, charts and herbarium equipment..... | \$350 |
|                           | One hundred hand lenses.....  | 150   |
| 2. Horticultural Dep't... | Heating apparatus and extension of green house and graft room.....                                    | 1,000 |
| 3. Entomological Dep't.   | Scalpels, dissecting needles, forceps and other laboratory aids.....                                  | 25    |

In closing let me say that much credit is due H. Ness, B. Sc., for energetic and efficient assistance.

S. A. BEACH,

Associate Professor Horticulture and Botany.

December 9, 1890.



## DEPARTMENT OF CHEMISTRY AND MINERALOGY

*Dr. W. L. Bringham, President:*

DEAR SIR—In reviewing the Department of Chemistry and Mineralogy for the past two years, there is much for encouragement in the future, although there are several requisites that must be obtained if it is hoped to place the department upon the high plane of continued usefulness to the wants of the College, and to satisfy the demands made upon it by the people of the State.

We have from time to time added important pieces and accessories of apparatus, until we are fairly well equipped to conduct any line of work which the average modern laboratory would be expected to undertake. Some of this material is furnished by the station and most of the analytical work performed in connection with station work. But it must be remembered that the College has never surrendered this right to the station, and to conduct chemical investigation is a part of the inherent privileges belonging to the College proper.

We are fully equipped for the analysis of soils, waters, fertilizers, feed stuffs, milk, sugar, wine, ores, and for special studies in the line of agricultural chemistry. In addition to this, we carry a large lot of chemicals and apparatus used by the students in their practical work, furnished to them free of charge in any way. Facilities that probably cannot be duplicated at any laboratory in the country. Our apparatus is generally of the best and latest improved construction. Our facilities for steam, evaporation, drying and assaying are expensive and thorough.

### COURSE OF INSTRUCTION.

First term...2d class...Inorganic Chemistry...Chemical practice B. S. A.  
and B. S. H. students.  
1st class...Geology.....Agricultural Chemistry B.  
S. A. and B. S. H. students.  
Metallurgy....B. M. E. students' practice,  
B. S. A., B. S. H. and B.  
M. E. students.  
Second term..Same as above, except Agricultural Chemistry in the first  
class is dropped.  
Third term...Organic Chemistry is substituted in the second class, Geology  
is dropped in the first class; otherwise, same as above.

Text books are used mainly throughout, as the plan is believed to be superior to the lecture system. In addition to the above, from three to six hours per week have been devoted to special students and to those studying for their master's degree.



I have conducted the entire recitation room work myself, except during this session, when the increased number of students has made it necessary to have help from my assistant, Mr. P. S. Tilson, who has conducted the work in a most conscientious and satisfactory way.

Previous to this session, Mr. Duncan Adriance, now assistant chemist to the station, aided me in the instruction of practical chemistry. His connection with the department and faithfulness of work have been most satisfactory to me. We put great stress upon thorough instruction and to our work in this direction we invite your closest scrutiny.

Since my connection with the College, January, 1888, agricultural chemistry, metallurgy, assaying and mechanical practice have been introduced into the department. Practice for the B. C. E. Students was also introduced, but for want of laboratory space and because of the crowded curricula in this course, practice was suspended.

The students in my department are generally earnest and enthusiastic in their work. They are emulative and strive for distinguished success. The desire to learn permeates every class, and only in special instances have I been dissatisfied with the results. The time is not far distant when these young men will add greatly to the economic products and material resources of the State.

#### ANALYTICAL WORK.

I respectfully refer you to the published annual reports of the station for work done in connection therewith. In addition we have a bulletin from this department now ready, involving much time and labor. I believe it is the policy of the director that work in this direction shall be accessory to the agricultural departments; our analytical work must in a measure be gauged by the demand made upon it by the director, whose applications for work have in each case received prompt attention. But we have done much not connected with the other departments, and many analyses for the people of the State, for whom work is done free except for actual cost of chemicals and probable breakage.

#### EFFECT OF COTTON SEED AND ITS PRODUCTS ON BUTTER.

We discovered and investigated this important scientific and practical result. Analytical work and conclusions were published in correct chemical literature more than a year ago. Since that time the director of the station has published a bulletin upon the same subject, with which you and the public are probably familiar.

## EXHIBITS.

We are frequently called upon to make a display of wares and of work done by the students at various fairs, conventions and other assemblies in the State. In most cases we have endeavored to respond to these demands; we have, however, not always been impressed with the advisability of doing so. It is a matter determined by the faculty, and if it is to be continued I should recommend the establishment and permanent keeping of apparatus for this special object. In all cases a man should be detailed to accompany the exhibit—see that it is properly set up and safely and promptly returned.

## SUGAR WORK.

Upon consultation with the director a man was detailed for special work at Harlem sugar farm. Mr. Duncan Adriance was selected, and will be away about two weeks. This action is based upon the representation of its necessity by Mr. C. K. Fuequa, chemist to the farm, whose letters are ready to be placed before you, in case you want additional information upon the subject.

## FARMERS' INSTITUTES.

Since these were organized I have attended six of them, having been called upon by the director of the stations to attend three during the last summer. I think generally they meet the objects for which they are intended. But in many instances they have been held in towns too large to reach the farming classes—except a few advanced stockmen, nurserymen, horticulturists and large planters, who are already practicing most of the principles in which we are supposed to impart special instruction.

## LOYALTY AND SUPPORT TO THE DEPARTMENT.

I feel that whatever success the department has reached or whatever development awaits it in the future must be due in a large measure to support and assistance given it by help from within and encouragement from without. The honorable board of regents have contributed in every way possible to our advancement, and you, equally with your predecessors, have given me a moral support, without which it would be difficult to advance under, otherwise the most fortunate circumstances.

## CHAIR OF MINING ENGINEERING AND GEOLOGY.

As you are aware geology and assaying are at present taught in this department. I look forward to the time when these,

with mineralogy, will constitute a separate chair in the institution. The end cannot be attained right away, perhaps, but I respectfully present it for your consideration as a subject worthy of careful thought. Mining engineering is likely to become at no distant day, a prominent industry of the State. It seems to me important that as fast as possible our young men should be educated to fill positions in the direction and management of the work. In too many instances have the Southern States been compelled to look beyond their own borders for men skilled in technical and scientific training. This has retarded the growth of the South, and the more rapidly education can remove the cause, the more prosperous will the country become.

#### SEPARATE LABORATORY BUILDING.

The leading agricultural colleges in the country have felt the necessity of providing adequate and convenient facilities for thorough instruction and training in practical chemistry. This is notably the case in Alabama, Mississippi and Michigan. At each of these, among many others, separate chemical laboratory buildings have been constructed and expensively equipped. There are many reasons why we should have such a building here—

First and most important, more space must be provided, even if we have, next year, no increase of students over the present number, when the present third class becomes second class we will be brought face to face with the fact that space cannot be had for their instruction. I present this fact to you now that means may be reached in time.

Second, *Convenience*. It is difficult to improvise and alter the arrangement of rooms constructed without any consideration whatever to the needs of a laboratory, in such a way as to secure efficiency and convenience.

Third, *Health and Safety*. No one acquainted with the character of work can deny the importance of ventilation with a view of securing, as far as possible, health to the students and employees of the department. There is always more or less danger in stored chemicals. Conflagration is a frequent disaster in drug stores, chemical laboratories and chemical manufacturing houses. So long as the department is quartered in the present building, its valuable papers and publications, apparatus in chemical and other departments, are subjected to continual danger from fire.

I have urged the importance of this matter in every college report made by me since my connection with this institution. Now that we appear to be upon the verge of a largely increased attendance I cannot with sufficient emphasis urge upon you, the Honorable Board and the people of the State, the imperative demand of a well equipped laboratory building. In some way, additional space must be provided, or students must be denied entrance to the department.

Respectfully submitted,

H. H. HARRINGTON,  
Professor of Chemistry and Mineralogy



REPORT OF THE DEPARTMENT OF CIVIL ENGINEERING AND PHYSICS.

*Dr. W. L. Bringham, President:*

SIR—In compliance with your request, I herewith submit report on the condition and needs of the Department of Civil Engineering and Physics.

The course in civil engineering extends through the third and fourth years of undergraduate study. The first class study during the first term, topographic surveying, railroad engineering—location of tangents and curves with reference to the solution of general and special problems, making profiles, cross-sectioning, calculation of excavation and embankment, etc. During the second and third terms they study stresses in roofs and bridges, strength and resistance of materials with examples in designing. Practice with field instruments and testing machine five hours per week throughout the year.

The second class study graphic statics in the first term, instruction entirely by lectures. In the second term the subject of road making is taken up. Instruction by text book and lectures. The spring term is devoted to land surveying with field practice.

The entire third class study Physics, using as text book Peck's Ganot, a translation from M. Ganot's Popular Physics. The subject is treated in a very elementary manner, but is sufficient to meet the wants of the third class.

The second class mechanical students study Deschanel's Natural Philosophy Part II, on Heat, during the first term. In the second term they take up Electricity and Magnetism, as do the students pursuing the civil engineering course.

The department is in a very prosperous condition and the number of students taking civil engineering and physics is rapidly increasing. There are at present in the department the following number of students:

Civil engineering, first class.....	7
Civil engineering, second class.....	31
In the spring term the entire second class study surveying. Their number will probably be about fifty or sixty.	
In the physics course there are:	
Second class. ....	40

Third class..... 97

The above numbers justify me in saying that the first and greatest need of the department is provision for the separation of civil engineering and physics into two distinct departments or schools. Under the present arrangement the professor has no time for the proper preparation of subject matter for lectures and of apparatus for class experiments. The classes, too, are necessarily divided into sections that are entirely too large to secure the greatest good to the student. There is more than enough work, properly done, in either subject to occupy the entire time of a professor.

The civil engineering side of the department is unusually well equipped with instruments and only needs sufficient appropriation to repair injured instruments, to add some few pieces and for current expenses, such as the purchase of material for use with the testing machines, etc. The physics division, however, could use to advantage a large appropriation. The apparatus on hand is rather limited in character and in very poor condition. Many of the piles, batteries, etc., are worn out and utterly useless.

The library and reading room are insufficiently supplied with reference books and periodicals, both in civil engineering and physics.

Even now the department is crowded and badly needs more storage room and more and better facilities for demonstration in the lecture room.

In order that the proper development of both civil engineering and physics may be secured I would respectfully urge:

1. A separation of civil engineering and physics into two distinct department.
2. Additional lecture rooms and store rooms for instruments.
3. An annual appropriation to the department of civil engineering of \$200 for current expenses, and to the department of physics, \$800 or \$1,000 per year until the department has been built up to the proper standard.
4. An appropriation of \$100 per year for the purchase of books on these subjects for use in the library and section room.

Respectfully submitted,

J. C. NAGLE,

Associate Professor of Civil Engineering and Physics.

December 8, 1890.

## DEPARTMENT OF DRAWING.

*To the President of the A. & M. College:*

SIR—I respectfully submit the following report of the Department of Drawing. Instruction has been given to the different classes, as shown by the following outline of the course of study:

### FOURTH CLASS.

Penmanship: Muscular movement writing with a view of developing a plain and rapid business hand.

Free Hand Drawing: A course of drawing beginning with simple exercises from the blackboard and from dictation, advancing to model drawing, right line models at first and later models involving simple curves as found in Greek vases, and then to elementary perspective, shading and lettering.

### THIRD CLASS—AGRICULTURAL COURSE.

Free Hand Drawing: Drawing from symmetrical models, vases, etc., from skeleton models until the difficulty due to the position of the object is overcome, and later plants, fruits, foliage, and parts of the human body from cast or still life.

### THIRD CLASS—MECHANICAL COURSE.

Mechanical Drawing: A series of plain figures, geometrical problems, higher plain curves, gear teeth projections and lettering.

### SECOND CLASS—AGRICULTURAL COURSE.

Mechanical Drawing: A short course during the spring term as needed in the study and practice of surveying.

### SECOND CLASS—MECHANICAL COURSE.

Descriptive Geometry: Faunce's descriptive geometry used as a text, supplemented by original problems, given at regular intervals, involving sections, developments and shadows.

Mechanical Drawing: Conventional signs and methods, and application of the principles studied in descriptive geometry in the drawing of different pieces of mechanism.

### FIRST CLASS—B. M. E. AND B. C. E. COURSES.

Mechanical Drawing: General and detail drawings and sec-

tions of machines, bridges, buildings, etc., tracing and blue-printing, tinting and topographical drawing.

Free Hand Drawing is continued in this class as well as in the second and third classes, as a necessary part of all mechanical drawing.

The department is fairly well equipped with models, instruments, etc., but there should be a separate drawing room for the first and second classes, so that the members of those classes can work at times when the drawing room proper is used by other classes.

It would further be a great advantage if the drawing rooms were in or near the machine shops.

Since the present drawing room is the only large room in the main building and must be used for examinations of all large classes, and since it could be used to advantage as a lecture room for large classes, I would respectfully recommend that in building an addition to the machine shops, as set forth in the report of the professor of mechanical engineering it be built two story, and the second story assigned to the Department of Drawing.

If this cannot be done, then I would respectfully ask that another room in the main building be assigned to the department and an appropriation of \$250 made to furnish the same with tables, desks, etc.

Very respectfully,

F. E. GIESECKE,  
Associate Professor of Drawing.



## MILITARY SCIENCE AND TACTICS.

COLLEGE STATION, TEX., December 13, 1890.

*President of the College:*

SIR—I have the honor to submit the following report as professor of Military Science and Tactics and as Commandant of Cadets.

Pursuant to paragraph 14, Special Orders No. 227, Headquarters of the Army Adjutant General's office, Washington, D. C., September 27, 1890, I reported for duty on the 7th of October last and formally entered upon the discharge of my duties October 9, 1890, relieving Professor Giesecke, acting commandant. On account of the great number of students in attendance this year, the battalion is divided into eight companies for drills and reviews by battalion—giving instruction to a greater number of cadet officers—but the old organization of the battalion into four companies has been retained as the permanent one.

The cadet officers are appointed by the president upon the recommendations of the commandant. Commissioned officers from the first class, sergeants from the second class and corporals from the third classes. The third and fourth classes attend drill daily, the first and second but three times a week, the drill lasting but fifty minutes. For the thorough instruction of the new cadets, the cadet sergeants should attend drill daily during the fall term, and when it is remembered that the cadet officers of the first and second classes have just assumed their new duties, and in many cases are just as ignorant of them as the new cadets are of theirs, the reason why any cadet officers should be excused from drill during the fall term is not apparent.

Many of the cadet officers of the first class have attended drill when not compelled to as a matter of interest and pride in their companies, and the second class sergeants also attended for a short time at your request.

The course of instruction has included the school of the soldier, company and battalion, the latter to a limited extent on account of a late start. The time allowed to drill is too short for the best results.

Guard mounting is held daily and inspections Sunday mornings.

During the winter terms the course prescribes lectures to the first class, tactics for the second class and the duties of guards and sentinels to all classes. It is my intention to have the guard duty performed as nearly as possible as prescribed in authorized manuals just received.

In the spring terms the school of the battalion for all classes, artillery drill for the second class and small arms firing for the first class is the required course.

Guard mounting daily, if proper time is given to inspection, is a great help to neatness and cleanliness in dress promote discipline and should be allowed time commensurate with its importance, which is not now done.

The two six-pound field guns have been given to the San Antonio arsenal, and new ones will be gotten by the spring term if possible.

I would recommend that the armory be moved to the room opposite my office that I may take proper care of the property. I consider it would be just as secure, and more so, than it is now. The laws of the College say an applicant must not be now.

All cadets should be at least five feet in height, and I recommend that that be added to the requirements.

If the requirements for admission now in force are strictly carried out, it will do away with the primary school feature of the college and improve not only the academic standing but greatly improve the discipline and military appearance of the battalion as a body of drilled men.

As commandant of cadets, I was at once confronted with the problem as to where I could find the rules governing the daily routine of the corps, as it was not advisable to make changes unless for improvement. My predecessor had gone. The acting commandant and yourself gave me valuable assistance, but both had other duties. Some I have found in the laws of the college, in the resolutions of the faculty, in the order books of former commandants. None of them I consider complete and up to date.

I would suggest that I be authorized to gather together and compile in compact form all the rules governing the daily routine of the corps and that they be printed and distributed and be known as "orders"—corps of cadets to be added to or taken from as experience proves best.

The same problem confronts every new cadet, and a large per cent of the delinquencies committed is through ignorance rather than intent, and to inform them the same orders have to be published again and again as each new class comes in. Their usual sources of information are older cadets and the report lists.

I have introduced a system of written explanations and permits. All explanations must be in writing and on official letter paper, properly signed and briefed. Cadets should bathe once a week, and those working in the shops or having anything to do with animals, oftener. They would be required to do so if the college offered proper facilities, which I consider it does not. A bath house is the first thing the college needs.

As to uniforms—it was late in November before some of the cadets had theirs—I suggest that the contract be let to a firm able to furnish the uniforms required in September, within one month after the term begins; also that a tailor be kept on the grounds for the purpose of repairing, as a cadet often has to make two trips to Bryan and wear his citizen's clothes a week in order to have his suit mended, altered or cleaned. I recommend that cadets working in the shops or on the farm be required to wear a fatigue suit or overalls and jackets to be prescribed by the professors of mechanics and agriculture, and that they be made a part of the uniform. Also that shoulder straps, chevrons, caps, overalls, jackets, gloves, blankets, sheets, pillow cases and clothing bags, all of uniform make, be kept for sale at the college. They are now of different styles, sizes, makes, colors. Also that official letter paper be kept for sale.

The rooming capacity is about one hundred and fifty with two in a room, the maximum number for good discipline and academic work. At present three or four occupy a single room. More barrack room is greatly needed for the present number even. There are also three or four trunks in each room. I recommend that a room be set apart for each company to store trunks, the cadets being allowed to go to them once a week. This would necessitate the placing of a set of shelves in each room, which could be done at trifling expense, they being preferable to the wardrobes now in some of the rooms.

I would recommend that shoe blacks be employed to black shoes, as a matter of economy, and to keep the rooms cleaner

The rooms should be scrubbed out once in two weeks. It is not done at all now.

A suitable place for cadets to exercise during the winter is of great importance.

I would recommend that in case a new building is erected for barracks the halls run across the building instead of lengthwise, three stories, divided into divisions of twelve rooms each. Such a building could be enlarged by adding division after division as necessity required. Also that a long covered porch be erected on one side for retreat parades in wet weather, also for guard mounting and inspections in wet weather.

The general government has furnished the military department with some blank books. A few more are required, with some printing occasionally. I recommend that \$50 be allowed the military department for that purpose. Also that the military department be allowed its share of the library appropriation for the purchase of books on military subjects. The corps has all it can ask and can be supplied, with the facilities now on hand in the way of good meals. The only suggestion I have to make is that the cadets be allowed clean napkins at each meal, as they have none at all at present.

Eight cadets have found the restraint of discipline too severe and have either deserted or been dismissed. It is not thoroughly understood by parents that this is not a reformatory.

I have been well sustained by the vice-president and faculty in my efforts to improve the discipline. I think I can report some improvement.

The morning report shows a maximum of 279 and a minimum of 255.

The military department, as one of the departments of this college, should be made thoroughly efficient, as its influence is felt throughout every other department of the institution.

Very respectfully your obedient servant,

BENJ. C. MORSE,

Second Lt. Twenty-third Infantry.

Professor of Military Science and Tactics.



DEPARTMENT OF LANGUAGES.

*To Prof. W. L. Bringham, Ph. D., Vice President A. & M. College:*

Ever since the higher institutions of learning have come into fashion, such as universities and colleges, the study of foreign languages is getting more and more an essential requisite in all scientific schools. It is not the application in life whereby foreign language holds a high place in such schools, but it is rather the influence exercised by the study of foreign language which invigorates and sharpens the mind. Correct language means correct thinking, and the study of a foreign language is in itself nothing but the most practical and economical lesson of learning to think correctly. Since in practical schools, such as the A. & M. Colleges are, the mind of the student is almost exclusively directed to things which are objects of the external senses, there is no little danger that the mind of the pupils may become superficial and shallow. The natural antidote and remedy for this intellectual defect is offered to us in the study of foreign language.

Very respectfully,

REV. WIPPRECHT,  
Professor of Languages.

## REPORT OF SURGEON.

*Prof. W. L. Bringham, Vice President:*

SIR—Since my last biennial report many improvements have been made at the hospital, and it is now tolerably well equipped. I have secured a very good man to act as nurse and janitor, so we are better prepared to take care of the sick than we have ever been. The hospital is not large enough, however, as there is room for only seven or eight patients, and in case of any unusual amount of sickness it would be impossible to take care all of the sick. The past two years have been unusually free from serious sickness, not a single death having occurred during that period—in fact, there has not been a death at the College for five years, and but one during the past eight.

In regard to sanitary matters I beg leave to renew the recommendations made in my last annual report. The campus should be thoroughly drained, additional walks constructed suitable sinks built, a large sewer to carry off slops from the mess-hall, and ample facilities for bathing provided. The bath-house is in a bad condition, and is never used during cold weather, as there are no means provided for heating it and supplying hot water. It would be a great improvement to substitute steam for the present method of heating rooms, as a more uniform temperature could be preserved. Cadets are very careless about keeping up fires in their rooms, and when they do have fires they generally keep their rooms too hot.

But of far greater importance than all other sanitary measures is the food prepared for cadets. It has been truly said that "cooking is one of the fine arts," and I feel almost tempted to add *one of the lost arts*. Excessive eating is responsible for many cases of sickness, but unwholesome and badly cooked food are responsible for many more. Too much care cannot, therefore, be exercised in the purchase and preparation of food for cadets.

Respectfully,

J. D. READ, M. D.,  
Surgeon A. & M. College.

## EXHIBIT A.

*Inventory of College Property.*

Detailed inventories of all College property of the College in the several departments are on file in this office, as required by the Board of Directors.

<i>Donated to the State by Brazos County:</i>		
Two thousand four hundred and sixteen acres of land.....	\$16,912 00	
One steward's residence.....	1,000 00	
		\$17,912 00
<i>Improvements made prior to 1876, when College was opened:</i>		
One main college building, 151½x60 feet, four stories.....	\$100,000 00	
One steward's hall and dormitory, 01x34 feet, three stories, brick.....	35,000 00	
One residence attached to steward's hall, 40x30 feet, four stories.....		
One stable and barn, 18x30 feet, frame.....	1,500 00	
Nine cisterns, brick, underground.....	1,800 00	
Five professor's residences.....	15,000 00	
Plank fence and cedar posts, enclosing college campus, 161 acres.....	500 00	
		158,800 00
<i>Improvements made from October, 1876, to January 1, 1887:</i>		
Two story frame building, 84x34 feet, wood working shop.....	\$4,000 00	
Two story frame building, farm house.....	1,000 00	
One story frame building, for employes.....	500 00	
Seven underground cisterns, brick.....	1,400 00	
Bath house, sixteen rooms.....	300 00	
Oil house.....	100 00	
Fence, plank and wire, small pasture, forty-six acres.....	100 00	
Telephone lines, college to Bryan, five miles..	250 00	
Brick shop, 80x40 feet, iron working.....	5,000 00	
Store room mess hall, with cellar.....	3,500 00	
Bakery.....	500 00	
Cattle shed.....	500 00	
Large barn.....	2,500 00	
Fences, pasture, east of college, 461 acres.....	1,500 00	
Fences, pasture, east of Houston and Texas Central railway, 850 acres.....	2,000 00	
Two tanks in pastures.....	500 00	
Piggery.....	500 00	
		23,150 00
<i>Improvements made since January 1, 1887:</i>		
Pfuffer hall, 112x46 feet, two stories, brick ...	\$11,500 00	
Hospital, one story, frame.....	2,000 00	
Farm house, one story, frame.....	1,300 00	
Creamery building and cistern.....	1,300 00	
Propagating and green house, brick.....	600 00	
Blacksmith shop, brick.....	600 00	
Seven underground cisterns.....	1,500 00	
Two frame servants' houses.....	400 00	
Three silos.....	1,500 00	
Austin hall, two story, 102x46, brick.....	11,000 00	

## EXHIBIT A.

*Inventory of College Property.*

Two professors' cottages, frame.....	3,200 00	
Fences, two pastures, west of Houston and Texas Central railway, 800 acres .....	1,500 00	
Fences, stock lots.....	500 00	
Addition to barn and stables.....	1,250 00	
Addition to cattle shed.....	250 00	
Large cattle shed.....	500 00	
Two employes' cottages. ....	400 00	
Assembly hall .....	22,218 64	
One professors' cottage, frame ....	2,204 38	
Surgeon's kitchen .....	230 00	
		258,815 02
<i>Equipment:</i>		
Mathematical department.....	315 00	
Language department.....	104 50	
English department.....	87 00	
Library, books, etc.....	5,000 00	
Drawing department .....	757 77	
Improvement of campus.....	700 00	
		6,964 27
<i>Agricultural Department:</i>		
Cattle.....	5,950 00	
Creamery, one-half interest.....	327 75	
Hogs.....	356 00	
Farm produce.....	1,010 00	
Farm implements.....	933 50	
Miscellaneous .....	739 90	
		9,317 15
Mechanical department.....		7,235 44
Chemical department.....		4,794 65
Civil engineering and physics.....		3,221 40
Mess hall furniture.....		4,608 38
Officers' dormitory.....		602 57
Book store.....		1,000 00
Veterinary department.....		1,851 98
Horticultural department.....		654 59
Hospital furniture and medicine.....		148 30
Museum .....		200 00
Office furniture.....		900 00
Assembly hall furniture.....		1,100 00
<i>Experiment Station:</i>		
Buildings .....	4,050 00	
Machinery.....	1,300 00	
Stock .....	1,980 00	
Office fixtures.....	364 50	
Implements .....	252 40	
Scales and fixtures.....	110 50	
Fertilizers.....	28 00	
Drainage.....	620 00	
Creamery, one-half interest.....	554 60	
		9,266 00
Total value equipment.....		51,314 76
Total permanent improvements.....		258,815 02
Grand total .....		310,139 18



# TABULAR STATEMENTS.



## EXHIBIT B.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
June					
5	1	Military department.....	Sword.....	P. S. Tilson.....	\$3 70
6	2	Maintenance.....	Express.....	Wells, Fargo & Co.....	37 25
6	3	Expense.....	Express.....	Wells, Fargo & Co.....	1 50
6	4	Printing.....	Express.....	Wells, Fargo & Co.....	95
6	5	Mechanical department.....	Express.....	Wells, Fargo & Co.....	3 65
6	6	Agricultural department.....	Express.....	Wells, Fargo & Co.....	35
7	7	Maintenance.....	Work on campus.....	S A Scott.....	10 00
8	8	Expense of board.....	Traveling expenses.....	C C Garrett.....	20 25
8	9	Expense of board.....	Traveling expenses.....	L L Foster.....	22 73
8	10	Expense of board.....	Traveling expenses.....	A J Rose.....	68 90
8	11	Maintenance.....	Janitor.....	J Geremonski.....	7 75
9	12	Maintenance.....	Janitor.....	B Warsjot.....	15 00
11	13	Horticultural department.....	Labor on campus.....	Willie Nichols.....	4 00
11	14	Medical attendance.....	Hospital steward.....	J H Subers.....	24 00
11	15	Agricultural department.....	Nails.....	Garth & Nash.....	16
11	16	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	6 00
11	17	Repairs.....	Work on roof.....	Wm Koppe.....	2 25
11	18	Maintenance.....	Water cooler and tanks.....	Wm Koppe.....	4 65
11	19	Expense.....	Bolt of ribbon.....	Cole Bros.....	2 00
11	20	Repairs.....	Hanging blinds.....	George L Deaton.....	13 50
11	21	Repairs.....	Lumber.....	Garth, Nash & Co.....	2 18
11	22	Repairs.....	Hardware.....	Charles Humes & Co.....	12 49
11	23	Repairs.....	Pipe and elbows.....	Wm Koppe.....	5 08
11	24	Horticultural department.....	Paint.....	T L Brunk.....	1 80
11	25	Expense.....	Rev A T Spalding.....	L L McInnis.....	25 00
11	26	Maintenance.....	Groceries.....	J W English.....	10 98
11	27	Maintenance.....	Sheeting and tablecloths.....	John T Wyse.....	17 44
11	28	Furniture.....	Water sets.....	A D McConico.....	6 00
11	29	Expense.....	Seals for diplomas.....	Clarke & Coates.....	80
11	30	Horticultural department.....	Iron.....	Wm Koppe.....	24 80
11	31	Agri ultural department.....	Roofing and paint.....	Wm Koppe.....	33 00
11	32	Fencing.....	Iron ornaments.....	Ripley & Bronson.....	7 10
11	33	Expense.....	Telegrams.....	L L McInnis.....	2 00
11	34	Expense.....	Safe.....	L T Noyes.....	100 00
11	35	Mechanical department.....	Linsed oil.....	George W Norrell.....	1 00
11	36	Smith shop.....	Pipe, belting, etc.....	Wm Koppe.....	8 19
11	37	Mechanical department.....	Screws and oil cups.....	Ripley & Bronson.....	7 26
11	38	Maintenance.....	Beef.....	W C Boyett.....	101 90
11	39	Maintenance.....	Herb's band for commencement.....	Carson, Sewall & Co.....	44 50
11	40	Expense of board.....	Traveling expenses.....	C C Garrett.....	7 50
11	41	Maintenance.....	Mess hall supplies.....	B Shiba.....	133 12
21	42	Profit and loss.....	Teaching.....	J D Read.....	75 00
24	43	Repairs.....	Trip to Houston.....	L L McInnis.....	8 20
24	44	Repairs.....	Trip to Houston.....	I M Scott.....	8 20
24	45	Expense.....	Stamps for office.....	L L McInnis.....	1 50
24	46	Maintenance.....	Janitor.....	Otto Boehme.....	26 00
24	47	Salaries.....	Services as gardener.....	T E Eberspacher.....	34 33
24	48	Salaries.....	Services as foreman of shop.....	A Horbens.....	75 00
24	49	Expense.....	Services as bookkeeper.....	T A Rogers.....	16 01
24	50	Maintenance.....	Services as janitor.....	Jes e Parks.....	15 06
24	51	Horticultural department.....	Services as ass't gardener.....	Geo Stilz.....	20 00
24	52	Salaries.....	Services as foreman of farm.....	J H Alsworth.....	66 60
24	53	Repairs.....	Work on main building.....	Geo L Deaton.....	12 56
24	54	Maintenance.....	Ice.....	Anheuser, Busch & Co.....	26 89
24	55	Expense.....	Trip to Austin.....	L L McInnis.....	6 18
24	56	Maintenance.....	Flour.....	Texas Mill and Elevator Co.....	28 90
24	57	C. E. Department.....	Tacks.....	Wm Koppe.....	15
24	58	Horticultural Department.....	Paper bags.....	Wm Koppe.....	1 25
24	59	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	133 37
24	60	Printing.....	Advertising bids.....	Brazos Pilot.....	5 10
24	61	Salaries.....	Agent of board.....	T M Scott.....	62 50
24	62	Maintenance.....	Salary as steward.....	B Shiba.....	50 00
24	63	Horticultural Department.....	Collar, pads and bridle.....	Hanway & Son.....	1 95
24	64	Mechanical Department.....	Lumber.....	Garth, Nash & Co.....	3 69
24	65	Agricultural department.....	For work in department.....	J H Alsworth.....	72 80
24	66	Agricultural department.....	Labor.....	J H Alsworth.....	4 50
24	67	Printing.....	Printing postal cards.....	Brazos Pilot.....	25 25
30	68	Experiment station.....	Freight.....	H & T Central Railway Co.....	25 60
30	69	Repairs.....	Labor for hire and hands.....	Geo L Deaton.....	85 50

## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
July					
2	70	Experiment station.....	Freight.....	W C Boyett.....	\$1 72
2	71	Experiment station.....	Hire of team.....	W C Boyett.....	5 00
2	72	Expense.....	Stamps.....	W C Boyett.....	20 00
2	73	Expense.....	Telegrams.....	W U Tel Co.....	2 95
2	74	Experiment station.....	Telegrams.....	W U Tel Co.....	1 35
3	75	Repairs.....	Labor.....	S L Terry.....	17 00
3	76	Experiment station.....	Freight.....	H & T Central Railway....	7 20
4	77	Repairs.....	Plastering.....	O Lacontrine.....	55 00
4	78	Printing.....	Advertising college.....	Dallas News.....	14 88
4	79	Printing.....	Advertising college.....	Galveston News.....	46 80
5	80	Experiment station.....	Two steers.....	W C Boyett.....	40 05
5	81	Fencing.....	Freight.....	H & T C Ry.....	24 14
5	82	Fencing.....	Wire.....	Sanborn & Warner.....	245 16
5	83	Repairs.....	Labor.....	J W Carson.....	2 50
5	84	Experiment station.....	Expense on cattle.....	B W Giles.....	9 30
5	85	Maintenance.....	Beef.....	W C Boyett.....	43 50
5	86	Experiment station.....	Labor.....	V Jones.....	11 25
5	87	Repairs.....	Work on main building.....	V Jones.....	53 75
5	88	Experiment station.....	Labor.....	J W Carson.....	15 35
5	89	Repairs.....	Labor.....	Geo L Deaton.....	35 00
5	90	Experiment station.....	Building sewer.....	H Johnson.....	2 40
9	91	Maintenance.....	Supplies.....	B Sbisaa.....	73 18
9	92	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	58 41
9	93	Maintenance.....	Meal.....	L A Scott.....	6 75
10	94	Expense.....	Postoffice box rent.....	Bryan postoffice.....	1 00
12	95	Expense of board.....	Traveling expenses.....	C C Garrett.....	4 90
13	96	Professors' residences.....	Freight.....	H & T C Ry.....	20 00
13	97	Maintenance.....	Freight.....	H & T C Ry.....	13 63
13	98	Repairs.....	Plastering.....	O Lac ntrine.....	2 00
13	99	Agricultural department.....	Express.....	Wells, Fargo & Co.....	40
14	100	Horticultural department.....	Labor in department.....	T L Brunk.....	21 65
14	101	Agricultural department.....	Labor in department.....	J H Alsworth.....	8 20
14	102	Experiment station.....	Labor.....	J W Carson.....	24 70
14	103	Repairs.....	Labor.....	Geo L Deaton.....	76 00
20	104	Agricultural department.....	Labor.....	J H Alsworth.....	28 50
20	105	Experiment station.....	Labor.....	J W Carson.....	28 30
21	106	Experiment station.....	Labor.....	J W Carson.....	7 50
21	107	Horticultural department.....	Labor.....	J F McKay.....	4 50
21	108	Experiment station.....	Labor.....	J W Carson.....	11 15
21	109	Repairs.....	Janitor.....	Bartos Warsjot.....	15 00
21	110	Repairs.....	On main building.....	Geo Deaton.....	53 00
21	111	Repairs.....	Work.....	J V Jones.....	60 00
23	112	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	126 91
23	113	Maintenance.....	Meal.....	L A Scott.....	6 75
23	114	Experiment station.....	Creamery.....	Cole Bros.....	3 00
23	115	Agricultural department.....	Repairs.....	A Oswald.....	3 25
23	116	Agricultural department.....	Hardware.....	LT Fuller.....	8 45
23	117	Horticultural department.....	Express.....	Wells, Fargo & Co.....	1 00
23	118	Museum.....	Corks and pins.....	J W Queen.....	2 80
23	119	Horticultural department.....	Seed, etc.....	Plant Seed company.....	12 80
23	120	Horticultural department.....	Tools.....	J Vick.....	9 85
23	121	Horticultural department.....	Cauliflower.....	J F Tillinghast.....	1 00
23	122	Museum.....	Cotton seed oil.....	G W Norrell.....	8 50
23	123	Repairs.....	Hardware.....	Wm Koppe.....	31 13
23	124	Maintenance.....	Hardware.....	Wm Koppe.....	2 80
23	125	Maintenance.....	Groceries.....	J W English.....	3 20
23	126	Horticultural department.....	Drugs.....	G W Norrell.....	45
23	127	Maintenance.....	Ice.....	Anheuser-Busch Co.....	16 14
23	128	Students' repairs.....	Material, renov'ing mattresses.....	Houston mattress factory.....	357 61
23	129	Maintenance.....	Material.....	Garth, Nash & Robinson.....	2 25
23	130	Repairs.....	Material.....	G W Norrell.....	2 30
23	131	Mechanical department.....	Hardware.....	Wm Koppe.....	3 18
23	132	Agricultural department.....	Material.....	Wm Koppe.....	1 85
23	133	Chemistry department.....	Water cooler.....	Wm Koppe.....	3 00
23	134	Horticultural department.....	Drugs.....	G W Norrell.....	1 51
23	135	Mechanical department.....	Materials.....	G W Norrell.....	2 00
23	136	Horticultural department.....	Materials.....	J M Howell.....	5 47
23	137	Agricultural department.....	Materials.....	G W Norrell.....	2 35



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
July					
23	138	Agricultural department...	Repairing cistern...	Fink & Braatz .....	\$16 00
23	139	Repairs .....	Material .....	Garth, Nash & Robinson...	289 45
24	140	Students' repairs .....	Freight .....	H & T C Ry .....	16 54
24	141	Live stock—exp'tment station	Freight .....	H & T C Ry .....	127 50
24	142	Maintenance .....	Groceries .....	Carson, Sewall & Co .....	1 00
24	143	Maintenance .....	Flour .....	Texas Mill & Elevator Co..	27 72
25	144	Repairs .....	Painting .....	W H Lauck .....	1000 00
25	145	Advertising .....	Advertising college .....	Galveston News .....	20 28
26	146	Expense .....	Bookkeeping .....	G A Rogers .....	16 67
28	147	Horticultural department...	Labor .....	J F McKay .....	9 10
28	148	Agricultural department .....	Labor .....	J H Alsworth .....	13 50
28	149	Repairs .....	Labor .....	G L Deaton .....	53 00
28	150	Repairs .....	Labor .....	N V Jones .....	30 00
Aug.					
1	151	Expense .....	Telegrams .....	W W Harris .....	2 15
1	152	Professors' houses .....	Brick .....	Chas Elliott .....	60 00
1	153	Repairs .....	Brick .....	Chas Elliott .....	30 00
1	154	Agricultural department...	Sweet milk .....	Mrs Katie Boyett .....	2 25
2	155	Printing .....	Catalogues .....	Clarke & Courts .....	337 35
2	156	Printing .....	Advertising .....	Greenville Herald .....	4 00
4	157	Printing .....	Advertising .....	San Antonio Freie Presse ..	9 00
4	158	Printing .....	Advertising .....	Corsicana Observer .....	3 50
4	159	Printing .....	Advertising .....	Paris News .....	6 50
4	160	Printing .....	Advertising .....	Ellis County Mirror .....	2 00
4	161	Printing .....	Advertising .....	Belton Reporter .....	2 00
4	162	Printing .....	Advertising .....	New Braunfels Zeitung .....	4 00
4	163	Book store .....	Stationery .....	D L Musselman .....	11 35
4	164	Expenses .....	Printing .....	J J Pastoriza .....	13 25
2	165	Repairs .....	Freight .....	H & T C Ry .....	10 52
2	166	Austin hall .....	Freight .....	H & T C Ry .....	20 00
2	167	Chemistry department .....	Freight .....	H & T C Ry .....	4 53
4	168	Salaries .....	Foreman of shop .....	A Harbers .....	75 00
4	169	Horticultural department...	Labor .....	J W Carson .....	4 50
4	170	Fence .....	Labor .....	J W Carson .....	6 00
4	171	Repairs .....	Materials .....	Garth, Nash & Robinson...	112 55
4	172	Printing .....	Advertising .....	Express Publishing Co .....	15 80
4	173	Printing .....	Advertising .....	Democrat Publishing Co .....	14 60
4	174	Repairs .....	Glass .....	James Bate .....	7 22
4	175	Repairs .....	Trip to Houston .....	L L McInnis .....	6 10
4	176	Repairs .....	Pump and pipe .....	J S Brown .....	5 00
4	177	Maintenance .....	Janitor .....	J Hickerhine .....	6 00
4	178	Printing .....	Advertising college .....	Richmond Democrat .....	4 00
4	179	Repairs .....	Labor .....	G L Deaton .....	54 00
4	180	Repairs .....	Labor .....	V Jones .....	30 00
4	181	Repairs .....	Labor .....	Jesse Parks .....	50 50
6	182	Repairs .....	Labor .....	Peter Winter .....	26 50
6	183	Maintenance .....	Flour .....	Texas Mill & Elevator Co ..	26 55
6	184	Agricultural department...	Drugs .....	G W Norrell .....	3 00
6	185	Maintenance .....	Groceries .....	Carson, Sewall & Co .....	96 00
6	186	Maintenance .....	Flour .....	Empire Mills .....	24 00
6	187	Printing .....	Advertising college .....	Brown County Banner .....	5 65
6	188	Chemical department .....	Lumber .....	Garth & Nash .....	19 16
6	189	Mechanical department .....	Material .....	G M Dilley & Son .....	5 00
6	190	Agricultural department...	Repairs .....	A Oswald .....	19 80
6	191	Agricultural department...	Labor .....	J H Alsworth .....	57 15
6	192	Maintenance .....	Groceries .....	Krause & Battle .....	8 35
6	193	Agricultural department...	One wagon .....	A Oswald .....	125 00
7	194	Salary .....	To T M Scott .....	T M Scott .....	62 50
7	195	Austin hall .....	Trip to Hearne .....	T M Scott .....	3 60
7	196	Austin hall .....	Freight .....	H & T C Ry .....	80 00
7	197	Repairs .....	Freight .....	H & T C Ry .....	60 00
7	198	Maintenance .....	Freight .....	H & T C Ry .....	2 88
7	199	Maintenance .....	Beef .....	Wm Boyett .....	101 75
7	200	Salary .....	Salary .....	G E Eberspacher .....	41 33
7	201	Austin Hall .....	Brick .....	Ellott & Erwin .....	300 00
6	202	Maintenance .....	Supplies .....	B Sbia .....	158 57
9	203	Austin Hall .....	Freight .....	H & T C Ry .....	40 00
9	204	Fencing .....	Surveying .....	J H Subers .....	4 00

## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888 Aug.					
10	205	Austin Hall.....	Freight.....	H & T C Ry.....	\$20 00
10	206	Barn.....	Building barn.....	Garth, Nash & Robinson..	1000 00
10	207	Repairs.....	Repairing barn.....	Garth, Nash & Robinson..	460 00
11	208	Repairs.....	Painting main building.....	W H Lauck.....	135 00
11	209	Repairs.....	Painting mess hall.....	W H Lauck.....	200 00
11	210	Repairs.....	Painting professors' houses.....	W H Lauck.....	514 01
11	211	Salary.....	Salary.....	J H Alsworth.....	66 66
11	212	Fence.....	Surveying.....	Jeff P Mitchell.....	12 00
11	213	Austin hall.....	Payment on erection.....	Garth, Nash & Robinson..	2000 00
11	214	Agricultural department.....	Labor.....	J W Carson.....	12 00
11	215	Repairs.....	Labor.....	J W Carson.....	32 10
11	216	Fence.....	Labor.....	J W Carson.....	9 00
11	217	Repairs.....	Brick work.....	Peter Winter.....	34 50
11	218	Fence.....	Posts.....	L A Scott.....	521 00
13	219	Repairs.....	Material.....	J W Byrnes.....	524 33
18	220	Austin hall.....	Brick.....	Elliott & Irwin.....	240 00
18	221	Horticultural department.....	Labor.....	J F McKay.....	14 50
18	222	Maintenance.....	Janitor.....	Otto Boehme.....	25 00
18	223	Repairs.....	Labor.....	Bartos Warsjot.....	15 00
18	224	Repairs.....	Labor.....	N V Jones.....	45 00
18	225	Repairs.....	Labor.....	C Lewis.....	36 25
20	226	Expenses.....	Waiter.....	Mary Johnson.....	3 00
20	227	Austin hall.....	Freight.....	H & T C Ry.....	20 00
20	228	Agricultural department.....	Freight.....	H & T C Ry.....	5 01
20	229	Veterinary department.....	Freight.....	H & T C Ry.....	52
24	230	Maintenance.....	Linen.....	Sanger Bros.....	40 00
24	231	Maintenance.....	Utensils.....	J Emick.....	24 70
24	232	Maintenance.....	Crockery.....	J F Dunble.....	203 58
24	233	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	103 52
24	234	Maintenance.....	Mattresses.....	H M Mattress factory.....	88 15
24	235	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	138 96
24	236	Repairs.....	Glass.....	Jas Bate.....	7 72
24	237	Agricultural department.....	Mower guard.....	L F Falley.....	4 80
24	238	Mechanical department.....	Hardware.....	J B Thomson & Son.....	30 05
24	239	Museum.....	Box rock.....	Carson, Sewall & Co.....	40
24	240	Maintenance.....	Beef.....	Foreman & Grace.....	6 00
24	241	Maintenance.....	Receipt books.....	Geo W Norrell.....	2 20
24	242	Maintenance.....	Groceries.....	J W English.....	4 20
24	243	Maintenance.....	Tickets.....	Brazos Pilot.....	1 50
24	244	Maintenance.....	Ice.....	Anheuser & Busch.....	29 02
24	245	Maintenance.....	Saddle blankets.....	Hanway & Son.....	2 75
24	246	Maintenance.....	Sundries.....	Wm Koppe.....	25 65
24	247	Repairs.....	Labor.....	Fink & Braatz.....	9 00
24	248	Repairs.....	Nails, hinges, etc.....	Wm Koppe.....	18 73
24	249	Repairs.....	Paint and putty.....	Geo W Norrell.....	4 10
24	250	Repairs.....	Lumber.....	Garth, Nash & Robinson..	25 44
24	251	Repairs.....	Nails.....	Wm Koppe.....	45
24	252	Agricultural department.....	Rope, leather, etc.....	Wm Koppe.....	12 01
24	253	Agricultural department.....	Ice.....	Anheuser Busch Co.....	1 20
24	254	Horticultural department.....	Bolts and nails.....	Wm Koppe.....	1 56
24	255	Horticultural department.....	Poison.....	T L Brank.....	5 00
24	256	Chemical department.....	Crash.....	Mistrot Bros.....	3 33
24	257	Chemical department.....	Steam fittings, etc.....	Wm Koppe.....	4 30
24	258	Museum.....	Labels.....	Brazos Pilot.....	2 50
24	259	Agricultural department.....	Blacksmithing.....	A Oswald.....	3 50
24	260	Maintenance.....	Blacksmithing.....	A Oswald.....	2 25
24	261	Expense.....	Warrants and receipts.....	Clarke & Courts.....	17 35
25	262	Printing.....	Advertising.....	H G W Herald.....	2 00
25	263	Agricultural department.....	Lumber.....	Garth, Nash & Robinson..	84
25	264	Printing.....	Advertising.....	Register Publishing Co.....	5 01
25	265	Printing.....	Advertising.....	Texas Farm and Ranch.....	14 70
25	266	Agricultural department.....	Oats.....	Garth, Nash & Robinson..	261 35
25	266 1/2	Agricultural department.....	Soap.....	G W Norrell.....	1 15
25	267	Mechanical department.....	Labor.....	J H Alsworth.....	4 45
25	267 1/2	Expense.....	Printing.....	Brazos Pilot.....	5 25
25	268	Agricultural department.....	Labor.....	J H Alsworth.....	21 70
25	268 1/2	Printing.....	Advertising college.....	Texas Farmer.....	19 20
25	269	Maintenance.....	Janitor.....	A Denwinski.....	11 00

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
Aug.					
25	270	Agricultural department.....	Supplies.....	H M K Wilson & Co.....	\$86 48
25	271	Repairs.....	Painting barn and shop.....	Garth, Nash & Robinson...	134 00
25	272	Repairs.....	Work.....	C Lewis.....	15 00
27	273	Printing.....	Advertising college.....	Dallas Times.....	17 50
27	274	Veterinary department.....	Oakum.....	H Marwitz.....	5 00
27	275	Water supply.....	Six inch pipe, etc.....	Ripley & Bronson.....	\$46 24
27	276	Austin Hall.....	Fittings.....	Ripley & Bronson.....	14 53
27	278	Agricultural department.....	Supplies.....	Wm Koppe.....	2 95
27	279	Engineer department.....	Apparatus.....	Riehle Bros.....	654 86
27	280	Expense.....	Trips to Dallas and Austin..	L L McInnis.....	31 85
27	281	Expense.....	Exchange.....	First National Bank.....	16 89
27	282	Maintenance.....	Steward.....	Bernard Shisa, Bryan, Tex..	100 00
27	283	Austin Hall.....	Four cars brick.....	Elliott & Irwin.....	120 00
27	284	Bookstore.....	Drawing instruments, etc.....	Westermann.....	599 15
27	285	Bookstore.....	Books.....	A L Barnes & Co.....	43 20
29	286	Salary.....	Agent of board.....	B M Scott.....	62 50
29	287	Expense.....	Assistant clerk.....	G A Rogers.....	16 67
29	288	Salary.....	Assistant gardener.....	G E Eberspacher.....	41 66
29	289	Salary.....	Foreman of workshops.....	A Harbers.....	75 00
29	290	Salary.....	Superintendent of farm.....	J H Alsworth.....	66 66
29	291	Maintenance.....	Janitor.....	G A Rogers.....	52 00
29	292	Repairs.....	Labor.....	G A Rogers.....	34 00
31	293	Maintenance.....	Beef.....	Wm A Bayette.....	81 53
31	294	Repairs.....	Freight.....	H & T C Ry.....	6 66
31	295	Fencing.....	Freight.....	H & T C Ry.....	1 04
31	296	Austin Hall.....	Freight.....	H & T C Ry.....	110 00
Sept.					
1	297	Austin Hall.....	Brick.....	Elliott.....	180 00
1	298	Gas.....	Fixtures.....	Fay Gas Fixture Co.....	58 96
1	299	Fence.....	Labor.....	J H Alsworth.....	37 05
1	300	Repairs.....	Rock.....	R P Owen.....	16 50
1	301	Austin Hall.....	1 scriptures one.....	B E Hawse.....	12 00
1	302	Forge shop.....	Five anvil blocks.....	J H Subers.....	4 00
1	303	Repairs.....	Plastering.....	B Lacontine.....	10 00
1	304	Repairs.....	Brick mason and help.....	Peter Winter.....	83 20
1	305	Repairs.....	Six days labor.....	I Lewis.....	15 00
1	306	Repairs.....	Twelve days labor.....	N V Jones.....	60 00
1	307	Repairs.....	Work.....	J A Rogers.....	24 50
3	308	Horticultural department.....	Labor.....	J F McKay.....	15 00
3	309	Campus.....	Labor.....	J F McKay.....	4 20
3	310	Repairs.....	Plastering.....	O Laconture.....	25 00
3	311	Agricultural department.....	Labor.....	J H Alsworth.....	40 50
3	312	Expense.....	Express packages.....	E B Lomax.....	80
3	313	Expense.....	Telegram.....	W W Harris.....	3 30
4	314	Repairs.....	Labor.....	Julius Carson Glenn.....	9 29
5	315	Maintenance.....	Janitor.....	A Zorazie.....	3 30
3	316	Repairs.....	Lightning rods.....	W T Bennett.....	20 00
Aug.					
4	317	Maintenance.....	Miscellaneous expenses.....	B Shisa.....	331 28
Sept.					
4	318	Expense.....	Gal wire.....	Carson, Sewall & Co.....	2 48
4	319	Printing.....	Advertising college.....	Seguin Record.....	2 00
4	320	Printing.....	Advertising college.....	Southern Mercury.....	4 80
4	321	Printing.....	Advertising college.....	Texas Baptist Herald.....	7 20
4	322	Printing.....	Advertising college.....	Texas Christian Advocate..	15 60
4	323	Printing.....	Advertising college.....	Brenham Banner.....	10 00
4	324	Book store.....	Tacks and ink.....	Jas W Queen & Co.....	30 22
4	325	Vet. department.....	Drugs.....	Geo W Norrell.....	7 75
4	326	Horticultural department.....	Express.....	E B Lomax.....	50
4	327	Mechanical department.....	Button hooks.....	Wm Koppe.....	30
4	328	Chemical department.....	Repairs and fixtures.....	Wm Koppe.....	6 55
4	328 1/2	Chemical department.....	Imp boxes.....	Geo W Norrell.....	1 20
4	329	Maintenance.....	Flour.....	Texas Mill & Elevator Co..	107 21
4	330	Maintenance.....	Express.....	E B Lomax.....	1 65
4	331	Vet. department.....	Lumber.....	Grath, Nash & Robius... ..	4 36
4	332	Fence.....	Gal staples.....	Sanborn & Warner.....	5 50
4	333	Vet. department.....	Desks.....	J B Merwin School Sup Co	12 29
4	334	Furniture.....	Desks.....	J B Merwin School Sup Co	12 29



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1880.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1881 Sept.					
4	335	Maintenance.....	Oil.....	Waters, Pierce & Co.....	\$6 00
4	336	Maintenance.....	Ice.....	Anheuser-Busch.....	69 12
4	337	Maintenance.....	Six bushels meal.....	L A Scott.....	4 50
4	338	Maintenance.....	Mess Hall expense.....	Wm Koppe.....	4 23
4	339	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	359 59
4	340	Maintenance.....	Mess Hall expense.....	J W English.....	9 55
4	341	Agricultural department.....	One doz. bl'k and mem books.....	G W Norrell.....	1 30
4	342	Agricultural department.....	Wagon repairs.....	Wm Koppe.....	1 45
4	343	Agricultural department.....	Blacksmithing.....	A Oswald.....	6 65
4	244	Agricultural department.....	Ice.....	Anheuser-Busch.....	11 16
4	345	Expense.....	Copying ink.....	J J Pastoriza.....	1 50
7	346	Printing.....	Advertising college.....	Marlin Ball.....	3 50
7	347	Printing.....	Advertising college.....	Beaumont Enterprise.....	7 50
7	348	Maintenance.....	Wood.....	J H Suber.....	72 07
10	349	Veterinary department.....	Books.....	Wm R. Jenkins.....	117 71
10	350	Veterinary department.....	Veterinary instruments.....	John Reynders & Co.....	327 62
10	351	Veterinary department.....	Lumber.....	Garth, Nash & Robinson.....	12 28
10	352	Veterinary department.....	Locks, hinges, etc.....	Wm Koppe.....	10 75
10	353	Mechanical department.....	Lumber.....	Garth, Nash & Robinson.....	6 92
10	354	Mechanical department.....	Milling machine.....	Brown & Sharp Mfg. Co.....	454 10
10	355	Printing.....	Advertising college.....	LaGrange Journal.....	3 00
10	356	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	29 30
10	357	Agricultural department.....	Labor.....	J H Alsworth.....	8 10
13	358	Maintenance.....	Labor.....	Texas Mill & Elevator Co.....	4 80
13	359	Chemical department.....	Apparatus.....	S M Rumsey Mfg. Co.....	35 08
13	360	Printing.....	Advertising college.....	Mirror.....	2 00
14	361	Repairs.....	Work.....	N V Jones.....	5 00
14	362	Austin Hall.....	Freight.....	H & T C Ry.....	8 00
14	363	Refunded.....	Pork.....	A J Adams.....	10 00
15	364	Maintenance.....	Wood.....	J H Subers.....	40 68
15	365	Austin Hall.....	Brick.....	Elliott & Irwin.....	120 00
15	366	Agricultural department.....	Labor.....	J H Alsworth.....	9 85
15	367	Veterinary department.....	Services as carpenter.....	C Lewis.....	30 00
15	368	Repairs.....	Work.....	P Winter.....	62 65
15	369	Austin Hall.....	Part payment.....	Garth, Nash & Robids n.....	1000 00
15	370	Professors' houses.....	Part payment.....	Garth, Nash & Robinson.....	1500 00
15	371	Fence.....	Galvanized barbed wire.....	Sanborn & Warner.....	266 27
15	372	Printing.....	Advertising college.....	Herald Publishing Co.....	6 09
15	373	Printing.....	Advertising college.....	Converse & Co.....	12 00
15	374	Museum.....	Supplies.....	James W Queen & Co.....	68
15	375	Veterinary department.....	Materials.....	Garth, Nash & Robinson.....	3 00
15	376	Fence.....	Labor.....	Bartos Warsjot.....	7 50
15	377	Refunded.....	Absence.....	G A Rose.....	37 60
15	378	Repairs.....	Labor.....	S P Pettie.....	1 50
20	379	Austin Hall.....	Freight.....	H & T Central Railway Co.....	50 00
20	380	Maintenance.....	Freight.....	H & T Central Railway Co.....	4 03
20	381	Veterinary department.....	Freight.....	H & T Central Railway Co.....	1 04
20	382	Maintenance.....	Freight.....	H & T Central Railway Co.....	2 07
20	383	Agricultural department.....	Belts and screen.....	De Saval Separator Co.....	3 20
20	384	Book store.....	Books.....	D L Musselman.....	14 60
20	385	Book store.....	Books.....	Alex Forbes.....	10 31
20	386	Book store.....	Tacks.....	James W Queen.....	4 93
20	387	Book store.....	Store's Chemistry.....	Charles Scribner's Son.....	10 84
20	388	Book store.....	Books.....	Clark & Maynard.....	34 56
20	389	Repairs.....	Lumber.....	Garth, Nash & Robinson.....	25 97
20	390	Veterinary department.....	Lights.....	Garth, Nash & Robinson.....	7 48
20	391	Repairs.....	Hardware.....	A McGowan.....	1 43
20	392	Horticultural department.....	Hardware and crockery.....	Wm Koppe.....	7 70
20	393	Horticultural department.....	Economic objectives.....	W H Wamsley.....	44 63
20	394	Repairs.....	Pitcher pumps.....	J S Brown Hardware Co.....	5 37
20	395	Repairs.....	Hardware.....	Wm Koppe.....	271 70
21	396	Austin Hall.....	Brick.....	Elliott & Irwin.....	240 00
22	397	Fence.....	Labor.....	J H Alsworth.....	5 55
22	398	Agricultural department.....	Labor.....	J H Alsworth.....	4 50
22	399	Repairs.....	Material.....	Garth, Nash & Robinson.....	5 25
24	400	Maintenance.....	Laundry.....	Excelsior Ste. Laundry Co.....	86 20
25	401	Horticultural department.....	Trees.....	East Texas Hort Ass'n.....	6 90
25	402	Horticultural department.....	Plants.....	W H Mason.....	9 95



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1881 Sept.					
25	403	Horticultural department.	Plants.	H E McKay	\$9 55
25	404	Mechanical department.	Machine oil.	G W Norrell	1 60
25	405	Repairs.	Nails.	Garth & Nash	11 85
25	406	Chemical department.	Hardware.	Wm Koppe	1 30
25	407	Maintenance.	White meal.	Garth & Nash.	12 00
25	408	Veterinary department.	Hardware.	Wm Koppe	3 60
25	409	Horticultural department.	Vials and corks.	G W Nor ell.	25
25	410	Horticultural department.	Repairing two plows	A Oswald	1 00
25	411	Horticultural department.	Peas.	Morse & Stephenson	2 00
25	412	Repairs.	Lumber	Fulkerson Lawrence	56 39
25	413	Furniture	Bedsteads and chairs.	Scarrit Furniture Co.	253 70
25	414	Maintenance.	Oil.	Waters-Pierce Oil Co.	10 50
26	415	Austin Hall.	Trip to Hearue.	T M Scott.	2 60
25	416	Maintenance.	Trip from Waller to Houston	T M Scott.	3 35
25	417	Maintenance.	Hardware	Wm Koppe	11 00
25	418	Maintenance	Groceries.	Carson & Sewall.	54 96
25	419	Printing	Advertising college.	Christian Messenger	6 00
26	420	Horticultural department.	Chemicals.	Eimer & Arnd.	10 00
26	421	Drawing department	Artists' materials.	F W Devoe & Co.	79 72
28	422	Salaries.	To D Adriance.	A Adriance	33 33
28	423	Salaries.	To W B Philpott.	W B Phil ott.	60 00
28	424	Salaries.	To R F Smith.	R F Smith.	111 11
28	425	Salaries.	To T E Giesecke.	FE Giesecke.	75 00
28	426	Salaries.	To H H Hartington.	H H Harrington.	166 66
28	427	Salaries.	To J H Kinealy.	S Kinealy.	111 11
28	428	Salaries.	To G W Curtis.	G W Curtis.	166 66
28	429	Salaries.	To P Braun.	P Braun.	50 00
28	430	Salaries.	To M Francis.	M Francis.	55 55
28	431	Salaries.	To W L Bringham.	W L Bringham.	250 00
28	432	Salaries.	To L L McInnis	L L McInnis	294 44
28	433	Salaries.	To R Wippricht	R Wippricht	222 22
28	434	Salaries.	R H Whitlock.	R H hitlock	250 01
28	435	Salaries.	P D Brunk.	P L Brunk	111 10
28	436	Salaries.	A Harbers.	A Harbers	75 00
28	437	Salaries.	G E Eberspacher	G E Eberspacher.	41 66
28	438	Salaries.	S F Duggar	J F Duggar	33 33
28	439	Salaries.	J F McKay.	J F McKay	33 33
28	440	Salaries.	J H Alsworth	J H Alsworth.	66 66
28	441	Expense	Bookkeeping.	G A Rogers	16 67
29	442	Maintenance	Wood.	J H Suber, Jr.	40 68
29	443	Austin Hall.	Freight.	H & T Central Railway Co	90 00
29	444	Expense	Painter.	George Pletzer.	2 50
29	445	Horticultural department.	Labor.	J F McKay	30 60
29	446	Repairs	Carpenter.	C Lewis.	30 00
29	447	Maintenance	Janitor.	G A Rogers.	68 00
Oct					
1	448	Maintenance	Drummer.	J R Fisk.	20 00
1	449	Medical attendance.	Surgeon.	J D Read.	100 00
1	450	Maintenance.	Steward	B Shiea.	150 00
1	451	Agricultural department.	Labor.	J H Alsworth.	15 30
1	452	Austin Hall	Part payment on Austin Hall	Garth, Naah & Robinson.	2000 00
1	453	Professors' houses	Part payment on Prof houses	Garth, Nash & Robinson..	700 00
6	454	Agricultural department.	Labor.	J H Alsworth	36 70
6	455	Agricultural department.	Labor.	J F Duggar.	27 38
6	456	Agricultural department.	Labor.	H Ness.	12 60
6	457	Maintenance.	Feed.	W C Boyett.	254 96
6	458	Expense.	Stationery.	W C Boyett.	55 60
6	459	Repairs	Swinging scaffold.	W C Boyett.	1 18
8	460	Repairs	Part paym't roof mess builg	Dan Cowley.	5 00
9	461	Austin Hall	Freight.	H & T Central Railway Co	40 00
9	462	Maintenance	Mess house expense	B Shiea.	476 58
9	463	Salaries	T M Scott	T M Scott.	62 50
10	464	Austin Hall furniture.	Stoves.	Excelsior Manfact'g Co.	147 65
10	465	Assembly Hall	Advertising for contractor	Galveston News.	14 88
10	466	Prof residence	Plans and specifications.	E Heiner.	78 12
10	467	Austin hall.	Plans and sp cifications.	ET Heiner.	278 75
10	468	Assembly hall.	Plans and specifications.	ET Heiner.	612 50
10	469	Maintenance.	Ice.	Anheuser-Busch.	48 87

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1881					
Oct.					
10	470	Maintenance.....	Meal.....	Mrs F I Garth.....	\$9 85
10	471	Expense.....	Trip to Austin.....	L L McInnis.....	4 82
10	472	Maintenance.....	Griddles.....	Excelsior Mfg Co.....	4 50
10	473	Maintenance.....	Groceries and hardware.....	Wm Koppe.....	3 75
10	474	Maintenance.....	Flour.....	Texas Mill & Elevator Co.....	112 60
10	475	Maintenance.....	Oil.....	Waters-Pierce oil company.....	113 12
10	476	Maintenance.....	Groceries.....	Carson, Sewall & company.....	407 92
10	477	Repairs.....	Lumber.....	Garth, Nash & Robinson.....	67 05
10	478	Drawing department.....	Artists' materials.....	Geo W Norrell.....	1 30
10	479	Horticultural department.....	Hoe and handle.....	Wm Koppe.....	4 55
10	480	Veterinary department.....	Cubbard catcher.....	Wm Koppe.....	2 40
10	481	Chemical department.....	Packing.....	Wm Koppe.....	60
10	482	Veterinary department.....	Chemicals.....	Eimer & Arnold.....	117 97
10	483	Mechanical department.....	Lumber.....	Garth, Nash & Robinson.....	20 54
10	484	Mechanical department.....	Laths, etc.....	Manning, Maxwell & Moore.....	276 55
10	485	Mechanical department.....	Two unions.....	Wm Koppe.....	50
10	486	Civil Engineering department.....	Hat bet.....	Wm Koppe.....	75
10	487	Repairs.....	Hardware.....	Wm Koppe.....	2 16
10	488	Bookstore.....	German and Spanish books.....	Ginn & company.....	34 02
10	489	Bookstore.....	Twenty-four (Boisen) books.....	D C Heath.....	21 60
10	490	Bookstore.....	Books, drawing, in'ments, etc.....	B Westerman.....	154 20
10	491	Expense.....	Telegram.....	W W Harris.....	40
10	492	Expense.....	Printed note heads.....	Clark & Courts.....	4 00
10	493	Fence.....	Lumber.....	Garth, Nash & Robinson.....	24 85
10	494	Library.....	Books.....	N W McDonald & company.....	6 00
10	495	Austin hall.....	Gas pipe fixtures.....	Ripley & Bronson.....	2 43
10	496	Advertising and printing.....	Advertising college.....	Texas Iron Works.....	5 00
10	497	Agricultural department.....	Ice.....	A Heuser-Busch.....	9 00
10	498	Horticultural department.....	Buds.....	J T Whitaker.....	1 40
10	499	Repairs.....	Gas pipe fixtures.....	Ripley & Bronson.....	15 51
10	500	Chemical department.....	Bushings, b rners, etc.....	Ripley & Bronson.....	7 19
10	501	Horticultural department.....	Trees and plants.....	Wm Clowe.....	3 90
10	502	Horticultural department.....	Express charges.....	Wells, Fargo & Co Ex.....	4 20
10	503	Mechanical department.....	Express charges.....	Wells, Fargo & Co Ex.....	2 90
10	504	Maintenance.....	Express charges.....	Wells, Fargo & Co Ex.....	47 40
10	505	Book store.....	Express charges.....	Wells, Fargo & Co Ex.....	16 25
10	506	Horticultural department.....	Plants.....	T V Munson.....	1 45
10	507	Horticultural department.....	Buds.....	James Muir.....	1 40
10	508	Expenses.....	Rox rent.....	Postmaster.....	1 00
12	509	Austin Hall.....	rick.....	Chas Elliott.....	240 00
15	510	Fence.....	Unloading lumber.....	Geo Petty.....	75
15	511	Maintenance.....	Laundry.....	Exc. Steam Laundry.....	131 40
16	512	Austin Hall.....	Brick.....	John Robb.....	171 18
17	513	Salaries.....	Instructor of mathematics.....	Guy Carleton.....	20 00
20	514	Chemical department.....	Making desks and cases.....	C Lewis.....	25 00
20	515	Horticultural department.....	Makin paper case.....	C Lewis.....	10 00
20	516	Drawing department.....	Freight.....	H & T C R.....	60 00
20	517	Austin Hall.....	Labor.....	J H Alsworth.....	9 00
20	518	Agricultural department.....	Labor.....	J H Alsworth.....	9 00
27	519	Agricultural department.....	Freight.....	H & T C Ry Co.....	10 00
30	520	Austin Hall.....	Absence.....	F W Ballamp.....	39 00
31	521	Refunded.....			
Nov.					
1	522	Maintenance.....	Beef.....	W C Boyett.....	260 84
1	523	Salaries.....	Foreman of shop.....	A Harbers.....	75 00
2	524	Maintenance.....	For janitor and drummer.....	G A Rogers.....	108 00
2	525	Maintenance.....	Steward services.....	B Sbis.....	150 00
2	526	Expense.....	Telegrams.....	W W Harris.....	7 95
2	527	Expense.....	Pens and ink.....	G W N rrell.....	1 00
2	528	Expense.....	Blank draft book.....	Brazos Pilot.....	3 00
2	529	Expense.....	Song books.....	John Church Co.....	14 38
2	530	Salaries.....	Prof'r of mathematics.....	L L McInnis.....	294 44
2	531	Salaries.....	Prof'r of Eng. and history.....	W L Bringhurst.....	250 00
1	532	Salaries.....	Prof'r of languages.....	R Wippricht.....	222 22
2	533	Salaries.....	Prof'r of mechanical eng'ring.....	R H Whitlock.....	250 00
2	534	Salaries.....	Prof'r of agriculture.....	G W Curtis.....	166 6
2	535	Salaries.....	Prof'r of chemistry.....	H H Harrington.....	106 66
2	536	Salaries.....	Prof'r of horticulture.....	T L Brunk.....	111 16

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
Nov.					
2	537	Salaries	Prof. of civil engineering.	J H Kimaly	\$111 11
2	538	Salaries	Prof. of veterinary surgery.	M Fancis	55 55
2	539	Salaries	Adjunct Prof. of mathematics	R F Smith	111 11
2	540	Salaries	Instructor in drawing.	F E Giesecke.	75 00
2	541	Salaries	Asst. Prof. of Eng. and Hist'y	W B Philpott.	60 00
2	542	Salaries	Asst. Prof. of Chem. and Phys.	D Adriance.	33 33
2	543	Salaries	Professor of agriculture.	J F Duggar	33 33
2	544	Salaries	Foreman of orchard.	G E Eberspacher.	41 66
2	545	Salaries	Foreman of farm	J H Alsworth	66 66
2	546	Salaries	Assistant M. E. professor.	P Braun.	50 00
2	547	Salaries	Asst. Prof. of horticulture	J F M. Kay	33 33
2	548	Expense	Stationery	Clarke & Courts.	17 75
2	549	Expense	Public school directory.	C H Evans	5 00
2	550	Expense	Clerk and bookkeeper.	G A Rogers.	16 67
2	551	Agricultural department.	Labor	J H Alsworth	32 00
2	552	Horticultural department.	Lumber	Garth, Nash & Robinson.	8 71
2	553	Horticultural department.	Hardware	Wm Koppe	1 50
2	554	Civil eng. and phys. dept.	Materials	Jam-s W Queen & Co.	8 50
2	555	Chemical department.	Materials	Hanway & Son.	50
2	556	Printing	Advertisement	Clarion Ledger	5 25
2	557	Printing	Advertisement	Iron City News.	3 00
3	558	Expense board of directors.	Meet ing of board.	C C Garrett.	5 60
2	559	Repairs	Lumber.	Garth, Nash & Robinson.	78 88
2	560	Book store.	Books.	D Appleton & Co.	21 60
2	561	Book store.	Books.	Eldredge & Bro.	8 88
2	562	Furniture	Chairs.	Scarritt Furniture Co.	23 20
2	563	Fence	Lumber.	Garth, Nash & Robinson.	132 84
2	564	Fence	Hardware.	Wm Koppe	10 90
2	565	Fence	Hardware.	L M Rumsey.	30
2	566	Refunded.	Absence	Frank Echols.	15 00
2	567	Fence	Labor	J A Myers.	6 00
2	568	Repairs	Labor	F H McInnis	58 00
2	569	Horticultural department.	Labor	C A Lewis	20 00
2	570	Refunded.	Absence	C E Fagan.	15 00
2	571	Medical attendance.	Services as surgeon.	J D Read	100 00
2	572	Salary	Librarian	W B Philpott	20 00
2	573	Drawing	Lumber	Garth, Nash & Robinson.	22 07
2	574	Drawing	Drugs	G W Norrill.	1 40
2	575	Drawing	Tinware	Wm Koppe.	4 91
2	576	Mechanical department	Lumber	Garth, Nash & Robinson.	16 11
2	577	Mechanical department.	Hardware	Wm Koppe.	2 75
2	578	Maintenance	Wess Hall expense.	B Sbia	549 90
2	579	Auxiliary Hall	Brick.	Charles Elliott.	60 00
2	580	Water supply	Cistern	P Winter	33 25
2	581	Horticultural department.	Labor	J F McKay	36 00
2	582	Agricultural department	Labor	J H Alsworth	9 00
6	583	T J Reed	Absence	T J Reed.	15 00
8	584	Mechanical department.	Express	Wells, Fargo & Co.	6 90
8	585	Horticultural department.	Express	Wells, Fargo & Co.	4 30
8	586	Library	Express	Wells, Fargo & Co.	75
8	587	Maintenance	Express	Wells, Fargo & Co.	2 55
8	588	Book store	Express	Wells, Fargo & Co.	6 05
8	589	Maintenance	Express for washing.	Wells, Fargo & Co.	39 60
9	590	Maintenance	Flour	Texas Mill & Elevator Co.	163 00
9	591	Maintenance	Groceries	Carson, Sewall & Co.	370 39
9	592	Maintenance	Crockery	Z Emuich	8 05
9	593	Maintenance	Flour	Wm Koppe	30 00
9	594	Maintenance	Oil	Waters-Pierce Oil Co.	56 56
9	595	Maintenance	Laundry	Excelsior Steam Laundry.	125 10
9	596	Agricultural department	Labor	J H Alsworth	10 05
9	597	Water supply	Part payment on cistern.	Peter Winter.	50 00
12	598	Hospital maintenance.	Wood.	J H Subers	93 39
12	599	Agricultural department.	Labor	J F Duggar	24 65
13	600	Maintenance	Groceries.	Carson, Sewall & Co.	155 28
13	601	Maintenance	Meal	S A Scott	17 25
13	602	Maintenance.	Oil	Waters-Pierce Oil Co.	10 61
13	603	Salary	To T M Scott.	T M Scott.	65 50
13	604	Mechanical department.	Hauling wood.	J H Subers, Jr.	77 90



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
Nov.					
13	605	Agricultural department.	Labor.	J H Alsworth.	\$11 25
19	606	Medical attendance.	Hospital steward.	J H Subers, Sr.	15 00
20	607	Repairs.	Hardware.	Cincinnati Corrugating Co.	70 00
20	608	Repairs.	Hardware.	Charles Humes.	16 43
20	509	Veterinary department.	Glycerine.	G W Norrill.	50
20	610	Veterinary department.	Chemicals.	Whiteall, Tatum & Co.	50 30
20	611	Veterinary department.	Dry goods.	Cole Bros.	2 20
20	612	Veterinary department.	Hardware.	Wm Koppe.	12 95
20	613	Veterinary department.	Hobbles.	Hayway & Son.	1 50
20	614	Drawing department.	Books.	H C Bairs & Co.	7 50
20	615	Drawing department.	Materials.	Williams & Brown.	8 85
20	616	Chemical department.	Bottle castor oil.	G W Norrill.	25
20	617	Chemical department.	Leather.	Hayway & Son.	25
20	618	Horticultural department.	Manure.	H B Nixon.	2 00
20	619	Horticultural department.	Flower seed.	Hippard.	3 29
20	620	Horticultural department.	Band moulding.	Garth, Nash & Robinson.	60
20	621	Horticultural department.	Rose cuttings.	H M Stringfellow.	10 50
20	622	Agricultural department.	Repairs.	A Oswald.	1 10
20	623	Agricultural department.	Harness.	Hayway & Son.	10 00
20	624	Agricultural department.	Hardware.	Wm Koppe.	13 10
20	625	Agricultural department.	Oats.	A L Shirley.	391 30
20	626	Mechanical department.	Split pulleys.	L M Rumsey Mfg. Co.	35 29
20	627	Fence.	Padlock and keys.	Charles Hume & Co.	10 28
20	628	Water supply.	Pipe.	Wm Koppe.	2 70
20	629	Medical attendance.	Four pieces zinc.	Wm Koppe.	50
20	630	Advertising and printing.	Advertising college.	Charles A Kessler.	9 00
20	631	Printing.	Advertising college.	W A Adair.	3 50
20	632	Advertising and printing.	Advertising college.	Semi-Weekly Texas Citizen.	5 00
20	633	Book store.	Drawing materials.	James W Queen & Co.	52 75
20	634	Book store.	Ship curves.	Keuffel & Esser.	8 43
20	635	Book store.	Books of Eloquence.	Lee & Shepard.	12 00
20	636	Book store.	Books.	B Waterman.	1 20
20	637	Book store.	Materials.	Bausch & Lomb Opt. Co.	2 19
20	638	Expense.	Stationery.	J J Pastoriza.	18 50
20	639	Expense.	Trip to Austin.	L L McInnis.	6 50
20	640	Refunded.	Absence.	M F Sterritt.	12 00
20	641	Refunded.	Absence.	J W Head.	15 00
20	642	Maintenance.	Laundry.	Excelsior steam laundry.	89 70
20	643	Maintenance.	Ice.	Anheuser-Busch.	23 42
20	644	Water supply.	Part on cisterns.	Peter Winter.	30 00
20	645	Repairs.	Gas pipe.	J S Brown Hardware Co.	3 00
20	646	Fence.	Bolts for gate.	J S Brown Hardware Co.	2 25
20	647	Repairs.	Paint, etc.	Garth, Nash & Robinson.	10 90
23	648	Chemical department.	Materials.	Eimer & Amend.	55 28
23	649	Chemical department.	Chemicals.	Mallinckrodt Chem. Works.	23 75
23	650	Repairs.	Labor.	E L Eddleman.	5 00
23	651	Assembly Hall.	Freight.	H & T Central Railway Co.	20 00
23	652	Horticultural department.	Plants.	H E McKay.	4 00
24	653	Austin Hall.	Brick.	Chas Elliott.	120 00
24	654	Agricultural department.	Labor.	J H Alsworth.	3 35
24	655	Water supply.	Part on cisterns.	Peter Winter.	30 00
Dec.					
1	656	Assembly Hall.	Freight.	H & T Central Railway Co.	30 00
1	657	Assembly Hall.	Freight.	H & T Central Railway Co.	33 00
1	658	Mechanical department.	Hardware.	Franklin Van Winkle.	146 48
1	659	Maintenance.	Groceries.	Carson, Sewall & Co.	262 54
1	660	Maintenance.	Flour.	Texas Mill & Elevator Co.	165 33
1	661	Maintenance.	Janitor.	G A Rogers.	76 00
1	662	Salaries.	Prof. math. and chairman.	L L McInnis.	294 44
1	663	Salaries.	Prof. English and history.	W L Bringhurst.	250 00
1	664	Salaries.	Professor languages.	R Wipprecht.	222 22
1	665	Salaries.	Prof. mechanical engineering.	R H Whitlock.	250 00
1	666	Salaries.	Professor agriculture.	G W Curtis.	166 66
1	667	Salaries.	Professor chemistry.	H H Harrington.	166 66
1	668	Salaries.	Asst. prof. hort. and botany.	E L Brunk.	111 11
1	669	Salaries.	Asst. prof. civil eng and phys.	J H Kimaly.	111 11
1	670	Salaries.	Assistant veterinary surgeon.	M Francis.	56 55
1	671	Salaries.	Adjunct prof. mathematics.	R F Smith.	111 11



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
Dec.					
	672	Salaries	Professor drawing	F E Giessecke	\$75 00
	673	Salaries	Assistant prof. Eng and hist.	W B Philpott	60 00
	674	Salaries	Instructor blacksmith.	A Guenther	50 00
	675	Salaries	Asst. mechanical engineering	P Braun	50 00
	676	Salaries	Assistant professor chemistry.	D Adriance	33 00
	677	Salaries	Asst. prof. hort. and bottany.	J F McKay	33 00
	678	Salaries	Assistant prof. agriculture.	J F Duggar	33 00
	679	Salaries	Services as gardender	G E Eberspacher	41 66
	680	Salaries	Foreman of shops	C A Lewis	60 00
	681	Salaries	Foreman of farm	J H Alsworth	66 66
	682	Mechanical department.	Hardware	Wm Koppe	23 35
	683	Horticultural department.	Plants	F V Munson.	3 25
	684	Maintenance	Drummer	J R Fisk	20 00
	685	Expense	Bookkeeper	G A Rogers	16 66
	686	Maintenance	Man of all work	Jesse Parks	6 95
	687	Horticultural department.	Labor	J F McKay	20 80
	688	Maintenance	Wood	J H Suber. Jr.	32 55
	689	Mechanical department	Work on engine room.	J L Johnson	7 50
	690	Agricultural department	Labor	J H Alsworth	13 50
	691	Water supply	Part payment on cisterns.	Peter Winter	100 00
	692	Maintenance	Gravel	W C Boyett	263 02
	693	Chemical department.	Oil, gasoline	Waters-Pierce Oil Co.	14 14
	694	Maintenance	Oil	Waters-Pierce Oil Co.	16 60
	695	Austin Hall	Labor	Jim Mitchell	4 25
	696	Assembly Hall	Hauling brick	Jim Mitchell	4 40
	697	Maintenance	Steward	B Sbia	150 00
	698	Agricultural department.	Labor	J F Duggar	35 10
	699	Agricultural department.	Labor	J H Alsworth	93 20
	700	Medical attendance	Surgeon	J D Read	100 00
	701	Fence	Labor	J H Alsworth	9 20
	702	Maintenance	Mess hall supplies	B Sbia	551 63
	703	Maintenance	Expressage	Wells, Fargo & Co.	42 90
	704	Medical attendance.	Expressage	Wells, Fargo & Co.	25
	705	Expense	Expressage	Wells, Fargo & Co.	2 45
	706	Horticultural department.	Expressage	Wells, Fargo & Co.	9 75
Nov.					
19					
Dec.					
	707	Drawing department.	Expressage	Wells, Fargo & Co.	2 00
	708	Book store	Expressage	Wells, Fargo & Co.	7 95
	709	Veterinary department.	Expressage	Wells, Fargo & Co.	2 10
	710	Assembly Hall	Labor	Jim Mitchell	5 10
	711	Austin Hall.	Work	Jim Mitchell	4 80
	712	Repairs	Painting M. B. chimneys	J L Johnson.	25 00
	713	Agricultural department.	One box pigs	Tyler Pottery Co.	18 65
	714	Repairs.	Chimneys	S L Johnson.	25 00
	715	Fence	Labor	J H Alsworth	2 25
	716	Assembly Hall.	Freight	H & T Central Railway Co.	10 00
	717	Expense board of directors.	Traveling expenses.	A J Rose	10 65
	718	Fence	Labor	J H Alsworth	23 59
	719	Austin Hall	Labor	Jim Mitchell	7 00
	720	Expense board of directors.	Traveling expenses	Geo M Dilley	41 20
	721	Horticultural department.	Labor	J F McKay	15 35
	722	Maintenance.	Wood	J H Subers, Jr	30 80
	723	Professors' houses	Building two cisterns	Peter Winter.	167 80
	724	Salary	Agent board of directors.	T M Scott	62 50
	725	Austin Hall	Labor	A Harbers	43 60
	726	Agricultural department.	Hardware	Wm Koppe	27 72
	727	Horticultural department.	Bridle and whip	Hanway & Son.	1 00
	728	Veterinary department	Sundries	Wm Koppe	5 40
	729	Expense	Telegrams and telephone.	W W Harris.	36 70
	730	Mechanical department	Hardware	Wm Koppe	1 90
	731	Maintenance	Sundries	Wm Koppe	8 57
	732	Maintenance	Ice	Anheuser-Busch Co.	2 25
	733	Expense	To bank	First National Bank, Bryan	28 35
	734	Chemical department	Sundries	Wm Koppe.	9 45
	735	Mechanical department.	Lumber	Garth, Nash & Robinson.	8 70
	736	Expense	To 1,000 blanks	Brazos Pilot.	4 00
	737	Fence	Hardware	Wm Koppe	7 35

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1888					
Dec.					
16	738	Mechanical department.....	Student labor.....	Paul Brow.....	\$17 29
16	739	Chemical department.....	Maintenance.....	Kimer & Amend.....	119 65
16	740	Canceled.....			
16	741	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	137 36
16	742	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	133 95
16	743	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	131 94
16	744	Refunded.....	{ To amount refunded for maintenance on account of absence.....	C D Johns.....	45 00
16	745	Refunded.....	{ To amount refunded for maintenance on account of absence.....	B W Isaacs.....	45 00
16	746	Mechanical department.....	Hardware.....	George M Dilley.....	98 61
16	747	Mechanical department.....	Palleys.....	George M Dilley.....	13 25
16	748	Book store.....	Book.....	A L Barnes & Co.....	7 13
16	749	Furniture.....	Chairs.....	Sarritt Furniture Co.....	21 00
16	750	Fence.....	Wire and staples.....	Sanborn & Warren.....	17 47
16	751	Expense.....	3,300 class reports.....	J J Pastoriza.....	13 75
16	752	Austin Hall.....	4 inch cut ff.....	M Martin.....	6 00
16	753	Book store.....	Books.....	Bausch & Lomb.....	2 50
17	754	Mechanical department.....	Hardware.....	F Van Winkle.....	147 74
17	755	Repairs.....	Wall paper.....	James Bute.....	9 15
17	756	Assembly Hall.....	5,000 bricks.....	Chas Elliott.....	30 00
17	757	Maintenance.....	Six elbows.....	Wm Koppe.....	1 00
17	758	Fence.....	Hardware.....	Wm Ko pe.....	2 54
17	759	Austin hall.....	Hardware.....	Wm Koppe.....	6 47
17	760	Mechanical department.....	Machine oil.....	Geo W Norrill.....	1 50
17	761	Mechanical department.....	Lumber.....	Garth, Nash & Robinson...	9 96
17	762	Repairs.....	{ Painting, furnishing and putting glass in dwellings.	Wm Dodson.....	2 90
17	763	Repairs.....	Cement and lumber.....	Garth, Nash & Robinson...	21 60
17	764	Agricultural department.....	Lumber.....	Garth, Nash & Robinson...	6 16
17	765	Fence.....	One keg nails.....	Wm Koppe.....	3 00
16	766	Veterinary department.....	Apparatus.....	J Réynders.....	82 00
17	767	Austin hall.....	Labor.....	Arch Edwards.....	95
17	768	Fence.....	Labor.....	F H McInnis.....	6 00
17	769	Repairs.....	Labor.....	F H McInnis.....	28 00
18	770	Agricultural department.....	Labor.....	F H McInnis.....	14 00
18	771	Mechanical department.....	Hardware.....	Straight Line Eng Co.....	1 30
18	772	Medical attendance.....	Hospital steward.....	J H Subers Sr.....	15 00
18	773	Profit and loss.....	Building and painting.....	Garth, Nash & Robinson...	165 00
18	774	Horticultural department.....	Labor.....	Joho Turma.....	1 50
20	775	Maintenance.....	Freight.....	H & T C Ry.....	191 18
20	776	Agricultural department.....	Cotton seed.....	F A Gully.....	20 05
20	777	Book store.....	Books.....	F A Gully.....	25 00
20	778	Agricultural department.....	Student labor.....	J F Dugger.....	24 65
20	779	Fence.....	Pasture fence.....	J H Subers, Jr.....	150 04
20	780	Maintenance.....	Board for Peter.....	F A Gully.....	6 15
20	781	Horticultural department.....	Board for George Steltz...	F A Gully.....	11 75
20	782	Veterinary department.....	Lumber.....	Garth, Nash & Robinson...	124 80
20	783	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	43 20
21	784	Repairs.....	Wall paper.....	James Bute.....	1 97
21	785	Fence.....	Wire.....	Wm Koppe.....	5 20
21	786	Fence.....	Labor.....	J H Alsworth.....	9 00
21	787	Horticultural department.....	Work.....	J F McKay.....	7 45
21	788	Repairs.....	Labor.....	J L Johnson.....	108 00
22	789	Austin Hall.....	Labor.....	Jim Mitchell.....	3 00
1889					
Jan.					
1	790	Maintenance.....	Janitor.....	Anton Denwinske.....	18 00
5	791	Repairs.....	Papering one room.....	George Pletzer.....	5 00
5	792	Water supply.....	One cistern.....	Jim Mitchell.....	23 00
5	793	Expense.....	Bookkeeper.....	G A Rogers.....	16 67
5	794	Salary.....	Services as foreman shop.....	C A Lewis.....	60 00
5	795	Salary.....	Services as foreman orchard.....	G E Eberspacher.....	41 66
5	796	Salaries.....	Services as foreman farm.....	J H Alsworth.....	66 66
5	797	Salaries.....	Instructor-blacksmith.....	A M Guenther.....	50 00
5	798	Salaries.....	Asst Prof Mech Eng.....	Paul Brown.....	50 00

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Jan.					
6	799	Salaries .....	Asst Prof Hort and Botany..	J L McKay.....	\$33 33
5	800	Salaries .....	Asst Prof Agriculture.....	J L Duggan.....	33 33
5	801	Salaries .....	Asst Prof Chem and Phys....	D Adrance.....	33 33
5	802	Maintenance.....	Janitor and drummer.....	G A Rogers.....	58 00
5	803	Salaries .....	Asst Prof Eng and History..	W B Philpott.....	60 00
7	804	Salaries .....	Professor of drawing.....	E E Giesecke.....	75 00
7	805	Salaries .....	Adjunct Prof of Math.....	R F Smith.....	111 11
7	806	Salaries .....	Prof of Veterinary Science....	M Francis.....	55 55
7	807	Salaries .....	Prof of Civil Eng and Phys..	J H Kemaly.....	111 11
7	808	Salaries .....	Prof of horticulture.....	T L Brunk.....	111 11
7	809	Salaries .....	Prof of Languages.....	R Wipprecht.....	222 22
7	810	Salaries .....	Prof of Chemistry.....	H H Harrington.....	166 66
7	811	Salaries .....	Prof of Agriculture.....	G W Curtis.....	166 66
7	812	Salaries .....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
7	813	Salaries .....	Prof of English and History..	W L Bringham.....	250 00
7	814	Salaries .....	Prof of Math & Chr of Fac..	L L McInnis.....	294 44
7	815	Salaries .....	Agent of Board of Director..	T M Scott.....	62 50
7	816	Maintenance .....	Maintenance (beef).....	W C Boyd.....	224 94
7	817	Maintenance .....	Steward .....	B Sisa.....	150 00
7	818	Medical attendance.....	Surgeon.....	J D Read.....	100 00
7	819	Assembly Hall.....	Cement.....	H & C Ry Co.....	140 95
7	820	Assembly Hall.....	Brick.....	H & T C Ry.....	50 00
7	821	Assembly Hall.....	Brick.....	H & T C Ry.....	50 00
7	822	Fence.....	Lumber .....	H & T C Ry.....	45 90
7	823	Fence.....	Labor .....	I C Ellis.....	18 80
7	824	Agricultural department.....	Labor .....	J H Alsworth.....	110 00
7	825	Convention of A M College..	Expenses to.....	L L McInnis.....	72 99
7	826	Maintenance .....	Supplies.....	B Sisa.....	436 97
7	827	Maintenance .....	Groceries.....	Thurber W & Co.....	1574 87
7	828	Fence.....	Posts.....	L A Scott.....	173 75
7	829	Agricultural department.....	Express.....	Wells-Fargo Express Co.....	60
7	830	Chemical department.....	Express.....	Wells-Fargo Express Co.....	1 35
7	831	Maintenance .....	Express.....	Wells-Fargo Express Co.....	23 05
7	832	Veterinary department.....	Express.....	Wells-Fargo Express Co.....	10 00
7	833	Expense.....	Express.....	Wells-Fargo Express Co.....	25
7	834	Mechanical department.....	Express.....	Wells-Fargo Express Co.....	45
7	835	Library.....	Express.....	Wells-Fargo Express Co.....	1 45
7	836	Horticulture.....	Express.....	Wells-Fargo Express Co.....	35
12	837	Agricultural department.....	Labor .....	J H Alsworth.....	23 80
12	838	Agricultural department.....	Labor .....	J H Alsworth.....	10 70
12	839	Professors' cottages.....	Carpentry.....	Tom Cardwell.....	3 60
12	840	Water supplies.....	Distern .....	Jim Mitchell.....	12 00
12	841	Book store.....	Books.....	George W Curtis.....	114 80
12	842	Chemical department.....	Chemicals.....	Eimer & Amend.....	18 95
12	843	Chemical department.....	Supplies.....	Emil Greiner.....	9 60
12	844	Maintenance .....	Excelsior Laundry.....	Excelsior Steam Laundry ..	47 96
12	845	Agricultural department.....	Hardware .....	J S Brown H Co.....	2 20
12	846	Maintenance .....	Oil .....	Waters-Pierce Oil Co.....	16 60
12	847	Medical attendance.....	Dry goods.....	Sanger Bros.....	20 15
12	848	Maintenance .....	Supplies.....	T M Scott.....	18 00
12	849	Maintenance .....	Groceries.....	Carson, Sewall & Co.....	85 03
12	850	Maintenance .....	Flour.....	Texas Mill & Elevator Co.....	16 50
12	851	Expense.....	Box rent.....	I Q Labor, P M.....	1 00
12	852	Expense.....	Stationary.....	Geo W Norrell.....	3 20
12	853	Expense.....	Telegrams.....	Western Union Tel Co.....	1 50
12	854	Expense.....	Stamps.....	Wm C Buyett.....	2 00
12	855	Agricultural department.....	Hardware .....	Wm Koppe.....	18 03
12	856	Horticultural department.....	Hardware.....	Wm Koppe.....	8 25
12	857	Mechanical department.....	Hardware.....	Wm Koppe.....	2 75
12	858	Agricultural department.....	Lumber .....	Fulkerson & Co.....	198 70
12	859	Eng and physics.....	Lumber .....	Garth, Nash & Robinson.....	4 46
12	860	Horticultural department.....	Lumber .....	Garth, Nash & Robinson.....	10 22
19	861	Maintenance .....	Queensware.....	Z Eumich.....	17 85
19	862	Expense.....	Cash .....	First Nat Bank, Bryan.....	8 51
19	863	Horticultural department.....	Labor .....	J F McKay.....	7 80
19	864	Fence.....	Hardware.....	Wm Koppe.....	4 12
19	865	Bookstore.....	Books.....	J W Queen & Co.....	43 20
19	866	Expense (directors).....	Meeting of Board.....	C C Garrett.....	16 65



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Jan.					
19	867	Fence.....	Lumber.....	Garth, Nash & Robinson.....	\$81 90
19	868	Professor's house.....	Lumber.....	Garth, Nash & Robinson.....	7 65
19	869	Repairs (c. innery).....	Cement.....	Garth, Nash & Robinson.....	4 75
19	870	Fence.....	Labor.....	Agricultural department.....	41 10
19	871	Expense.....	Railroad fare.....	L L McInnis.....	6 08
19	872	Drawing department.....	Drawing boards.....	Jas W Queen & Co.....	40 23
19	873	Medical attendance.....	Services at hospital.....	J H Subers.....	15 00
19	874	Mechanical department.....	Lumber.....	Garth, Nash & Robinson.....	6 65
21	875	Agricultural department.....	Labor.....	Settegast.....	50
21	876	Profe-sor's cottage.....	Part payment.....	Gar h, Nash & Robin-on.....	425 00
21	877	Professor's cottage.....	Part payment.....	Garth, Nash & Robinson.....	410 00
22	878	Water supplies.....	Part payment (cistern).....	Jim Mitchell.....	25 00
22	879	Agricultural department.....	Freight.....	H & T C Ry Co.....	51 71
23	880	Refunded.....	Absence.....	D E Thrash.....	25 00
23	881	Assembly Hall.....	Labor.....	J H Alsworth.....	5 35
23	882	Assembly Hall.....	Freight.....	H & T C Ry Co.....	123 50
24	883	Assembly Hall.....	Freight.....	H & T C Ry Co.....	30 00
24	884	Refunded.....	Absence.....	J D Crawford.....	20 00
24	885	Refunded.....	Absence.....	R F York.....	10 00
24	886	Horticultural department.....	Board.....	I C Ellis.....	7 00
24	887	Museum.....	Bottles and corks.....	Whitall, Tatum & Co.....	7 58
24	888	Horticultural department.....	Trees.....	Pike Co Nurseries.....	29 61
24	889	Horticultural department.....	Shears (pruning).....	Moro ey Hardware Co.....	1 80
24	890	Horticultural department.....	Seed.....	Yoakum Seed Co.....	15 94
Feb.					
1	891	Salaries.....	Prof of mathematics.....	L L McInnis.....	294 44
1	892	Salaries.....	Prof of Eng. and history.....	W L Bringham.....	250 00
1	893	Salaries.....	Prof of languages.....	R Whipprecht.....	222 22
1	894	Salaries.....	Prof of mechanical eng'ring.....	R H Whitlock.....	250 00
1	895	Salaries.....	Prof of agriculture.....	G W Curtis.....	166 66
1	896	Salaries.....	Prof of Chem. and Min.....	H H Harrington.....	166 66
1	897	Salaries.....	Prof of horticulture.....	T L Brunk.....	111 11
1	898	Salaries.....	Prof of veterinary science.....	M Francis.....	55 55
1	899	Salaries.....	Adj Prof of mathematics.....	R F Smith.....	111 11
1	900	Salaries.....	P of C. E. and Phys.....	J F Kimaly.....	111 11
1	901	Salaries.....	Prof of drawing.....	F E Gieseke.....	75 00
1	902	Salaries.....	Asst Prof Eng. and histo y.....	W B Philpott.....	60 00
1	903	Salaries.....	Chaplain.....	C P Fountain.....	100 00
1	904	Salaries.....	Agent of board.....	T M Scott.....	62 60
1	905	Salaries.....	Asst Pr f of Chem and Phys.....	D Adrance.....	33 33
1	906	Salaries.....	As-t Prof of agriculture.....	J F Dnggar.....	33 33
1	907	Salaries.....	Asst Prof of horticulture.....	J F McKay.....	33 33
1	908	Salaries.....	Asst Prof of Mechanical E.....	P Braun.....	50 00
1	909	Salari s.....	Instructor of bla ksmithi g.....	A M Guenther.....	50 00
1	910	Salaries.....	Foreman of shop.....	C A Lewis.....	60 00
1	911	Salaries.....	Foreman of farm.....	J H Alsworth.....	66 66
1	912	Salaries.....	Gardner.....	G E Eberspacher.....	41 66
1	913	Medical attendance.....	Surgeon.....	J D Read.....	100 00
1	914	Maintenance.....	Stewart.....	B Sbsia.....	150 00
1	915	Expense.....	Bookkeeper.....	G A Rogers.....	16 66
1	916	Agricultural department.....	Bran.....	Empire Mills.....	216 00
1	917	Agricultural department.....	Corn.....	L A Scott.....	186 18
1	918	Re unded.....	Absence.....	J J Settegast.....	16 60
1	919	Maintenance.....	Lard oil.....	G W Norrill.....	1 60
1	921	Refunded.....	Absence.....	N R Slaughter.....	30 00
1	921	Maintenance.....	Laundry.....	Excelior Laundry.....	108 30
1	922	Veterinary department.....	Supplies.....	Bausch-Lomb Optical Co.....	111 78
1	923	Horticultural department.....	Supplies.....	Bausch-Lomb Optical Co.....	104 04
1	924	Horticultural department.....	Micrope.....	Bausch-Lomb Optical Co.....	10 13
1	925	Veterinary department.....	Supplies.....	Bausch-Lomb Optical Co.....	132 00
1	926	Agricultural department.....	Oats.....	Harrison & Co.....	266 90
1	927	Campus.....	Breast yoke.....	A Oswald.....	1 50
1	928	Fence.....	Pickets.....	Garth, Nash & Robinson.....	1 63
1	929	Agricultural department.....	Harness.....	Hanway & Son.....	8 60
1	930	Vet-inary department.....	Dry goods.....	Wm Koppe.....	80
1	931	Veterinary department.....	Hardware.....	Wm Kopp.....	1 64
1	932	Veterinary department.....	Drugs.....	Geo W Norrill.....	1 75
1	933	Veterinary department.....	Turn table.....	W H Bullock.....	7 45



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889 Feb.					
1	934	Chemical department.....	Supplies.....	J W Queen & Co.....	\$10 04
1	935	Chemical department.....	Bottles.....	Emil Greiner.....	7 10
1	936	Civil Engineer and Phys.....	Iron.....	G M Dilley & S n.....	3 73
1	937	Mechanical department.....	Coal.....	Wm Koppe.....	13 50
1	938	Mechanical department.....	Tools.....	F Van Winkle.....	59 67
1	939	Expense.....	Blank book.....	Clark & Courts.....	5 85
1	940	Mechanical department.....	Waste.....	F W Lutmann & Co.....	6 23
1	941	Book store.....	Books.....	B Westernman & Co.....	330 01
1	942	Maintenance.....	Janitors.....	G A Rogers.....	93 00
1	943	Maintenance.....	Beef.....	W C Boyett.....	195 92
2	944	Maintenance.....	Mess hall expenses.....	B Shis.....	432 98
2	945	Assembly Hall.....	Members of B Committee.....	J H Kimaly.....	50 00
2	946	Expense Board of Directors.....	Visit to college.....	C C Garrett.....	4 65
2	947	Agricultural department.....	Labor.....	F M McInnis.....	36 00
2	948	Professors' houses.....	Labor.....	F M McInnis.....	4 00
2	949	Fence.....	Labor.....	F M McInnis.....	4 00
2	950	Veterinary department.....	Labor.....	F M McInnis.....	18 00
2	951	Refunded.....	Absence.....	B M Rich.....	15 00
2	952	Civil Engineering and Phys.....	Supplies.....	J W Queen & Co.....	41 02
2	953	Horticultural department.....	Labor and board.....	T L B. unk.....	31 41
2	954	Water supply.....	Part pay on cistern.....	P Winter.....	15 00
2	955	Austin hall.....	Part payment.....	Garth, Nash & Robinson.....	1500 00
2	956	Repairs.....	Blinds.....	Garth, Nash & Robinson.....	80 35
4	957	Agricultural department.....	Labor.....	J H Alsworth.....	97 90
4	958	Maintenance.....	Flour.....	Texas Mill and Elevator Co.....	126 70
4	959	Maintenance.....	Meal.....	L A Scott.....	16 50
4	960	Maintenance.....	Hardware.....	Wm Koppe.....	1 00
4	961	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	101 44
4	962	Horticultural department.....	Seed.....	J W English.....	8 00
4	963	Agricultural department.....	Books.....	G W Norrill.....	3 60
4	964	Horticultural department.....	Trees.....	Wm Clowe.....	3 60
4	965	Agricultural department.....	Cotton seed.....	W C Boyett.....	26 75
4	966	Civil Engineering and Phys.....	Models.....	J W Queen & Co.....	276 17
4	967	Agricultural department.....	Hooks and eyes.....	Wm Koppe.....	35
4	968	Repairs.....	Hardware.....	Wm Koppe.....	1 66
4	969	Horticultural department.....	Lumber.....	Garth, Nash & Robinson.....	97
4	970	Book store.....	Instruments.....	J W Queen & Co.....	37 85
4	971	Salary.....	Instructor of Mathematics.....	Guy Carleton.....	30 00
4	972	Salary.....	Librarian.....	W B Philpott.....	30 00
5	973	Horticultural department.....	Board.....	I C Ellis.....	3 51
5	974	Maintenance.....	Board.....	I C Ellis.....	7 35
5	975	Work, stock and farm Imp.....	Labor.....	A Oswald.....	75 00
5	976	Campus.....	Blacksmithing.....	A Oswald.....	5 00
6	977	Horticultural department.....	Express.....	Wells, Fargo & Co.....	50
6	978	Expense.....	Express.....	Wells, Fargo & Co.....	25
6	979	Maintenance.....	Express.....	Wells, Fargo & Co.....	32 21
13	980	Expense.....	Railroad fare.....	T M Scott.....	8 68
13	981	Water supply.....	Sec. pay on cistern.....	Peter Winter.....	75 00
13	982	Agricultural department.....	Blacksmithing.....	A Oswald.....	5 00
13	983	Refunded.....	Dismissal.....	W L Holman.....	10 00
13	984	Fence.....	Lumber.....	Garth, Nash & Robinson.....	129 50
13	985	Furniture (Assembly Hall).....	Furniture.....	R Mitchell Furniture Co.....	1010 00
13	986	Assembly Hall.....	Chairs and lounge.....	Scarritt Furniture Co.....	95 50
13	987	Assembly Hall.....	Labor.....	J H Alsworth.....	6 25
13	988	Assembly Hall.....	Organ for chapel.....	J W McNair.....	411 00
13	989	Fence.....	Labor.....	J H Alsworth.....	13 75
13	990	Assembly Hall.....	Hauling.....	J Mitchell.....	2 60
13	991	Assembly Hall.....	First pay on cistern.....	J Mitchell.....	7 40
13	992	Maintenance.....	Wood.....	J H Subers.....	21 29
13	993	Repairs.....	First pay on work.....	A Sp nice.....	5 10
13	994	Water supplies.....	Third pay on cistern.....	P Winter.....	30 00
13	995	Drawing department.....	Drawing paper.....	D Van Nostrand Co.....	2 55
13	996	Drawing department.....	Cabinet and stand.....	Fink Braetz.....	105 00
13	997	Drawing department.....	Instruments.....	F Van Winkle.....	8 20
13	998	Drawing department.....	Fixtures.....	Scarritt Furniture Co.....	161 00
13	999	Bookstore.....	Books.....	B Westernman & Co.....	6 60
15	1000	Veterinary department.....	Mercurial gauge.....	J W Queen & Co.....	5 08
15	1001	Veterinary department.....	Lumber.....	Garth, Nash & Robinson.....	20 14

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Feb.					
15	1002	See No. 1078.....	Micro sec of teeth and bone.	F O Jacobs.....	.....
15	1003	Veterinary department.....	Books.....	B Westernman.....	\$10 23
15	1004	Veterinary department.....	Hardware.....	Wm Koppe.....	6 75
15	1005	Civil engineering and Phys.....	Lumber and cement.....	Garth, Nash & Robinson...	11 66
15	1006	Furniture.....	Tables and wash-stands.....	Fink & Braatz.....	45 00
15	1007	Mechanical department.....	Models of wheels.....	Jas W Queen & Co.....	159 15
15	1008	Fence.....	Lumber.....	Garth, Nash & Robinson...	18 45
15	1009	Repairs.....	Printing.....	Garth, Nash & Robinson...	283 35
15	1010	Repairs.....	Printing.....	Garth, Nash & Robinson...	145 00
15	1011	Repairs.....	Plastering room.....	Alfred Spruce.....	24 50
15	1012	Agricultural department.....	Painting barn.....	Garth, Nash & Robinson...	38 50
15	1013	Professors' houses.....	Painting water closets.....	Garth, Nash & Robinson...	5 60
15	1014	Veterinary department.....	Painting veterinary hospital.	Garth, Nash & Robinson...	22 75
15	1015	Fence.....	Labor.....	Agricultural department...	11 90
15	1016	Fence.....	Bolts and washers.....	Wm Koppe.....	1 75
18	1017	Agricultural department.....	Cotton seed.....	John Boriski.....	7 35
18	1018	Repairs.....	Labor.....	L A Sandles.....	5 25
18	1019	Maintenance.....	Hospital steward.....	J H Subers.....	15 00
19	1020	Mechanical department.....	Labor.....	P Braun.....	9 51
19	1021	Work, stock and farm Imp.....	Implements.....	L T Fuller.....	147 09
19	1022	Farm implements.....	Eureka harrow.....	Sauborn & Warner.....	16 65
19	1023	Agricultural implements.....	Hardware.....	L M Ramsey.....	5 13
19	1024	Board meeting.....	Trip to Austin.....	C C Garrett.....	14 10
19	1025	Expense.....	Trip to Austin.....	C C Garrett.....	13 70
21	1026	Farm implements (Agri).....	Buckeye mow. and plow pts.	L T Fuller.....	72 50
21	1027	Drawing department.....	O S blades.....	Garth, Nash & Robinson...	14 25
23	1028	Civil engineering and Phys.....	Moulds and scale.....	Richle Bros.....	21 90
23	1029	Civil engineering and Phys.....	Port-land cement.....	Garth, Nash & Robinson...	2 75
27	1030	Assembly Hall.....	Freight.....	H & T C Ry Co.....	98 49
27	1031	Drawing department.....	Freight.....	H & T C Ry Co.....	6 56
27	1032	Fence.....	Part payment on fence.....	J H Subers, Jr.....	35 00
27	1033	Chemical department.....	Freight.....	H & T C Ry Co.....	2 14
27	1034	Assembly Hall.....	Hauling bricks.....	J m Mitchell.....	8 40
27	1035	Water supply.....	Cistern.....	Jim Mitchell.....	27 60
Mar.					
1	1036	Salaries.....	Prof of Math and Chem.....	L L McInnis.....	294 44
1	1037	Salaries.....	Prof of Eng and History.....	W L Bringham.....	250 00
1	1038	Salaries.....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
1	1039	Salaries.....	Prof of Languages.....	R Wippricht.....	222 22
1	1040	Salaries.....	Prof of Agriculture.....	G W Curtis.....	166 66
1	1041	Salaries.....	Prof of Chemistry.....	H H Harrington.....	166 66
1	1042	Salaries.....	P of Hort and Botany.....	T L Brunk.....	111 11
1	1043	Salaries.....	Ass Prof of C E and Phys.....	J H Kimaly.....	111 11
1	1044	Salaries.....	Asst Prof of Vet Science.....	M Francis.....	55 55
1	1045	Salaries.....	Adj Mathematic.....	F F Smith.....	111 11
1	1046	Salaries.....	Instructor in drawing.....	F E Giesecke.....	75 00
1	1047	Salaries.....	Ass Prof of Eng and Hist.....	W B Philpott.....	60 00
1	1048	Salaries.....	Agent of board.....	T M Sco.....	62 50
1	1049	Salaries.....	Chaplain.....	C P Fountain.....	100 00
1	1050	Salaries.....	Prof of Mechanical Eng.....	P Braun.....	50 00
1	1051	Salaries.....	Inst of blacksmithing.....	A M Guenther.....	50 00
1	1052	Salaries.....	Foreman of farm.....	J H Alsworth.....	66 66
1	1053	Salaries.....	Gardener.....	G E Eberpocher.....	41 66
1	1054	Salaries.....	Asst Prof of Chem and Phys.....	D Adriance.....	33 33
1	1055	Salaries.....	Asst Prof of Agriculture.....	J F Duggar.....	33 33
1	1056	Salaries.....	Asst Prof of Horticulture.....	J F McKay.....	33 33
1	1057	Expense.....	Bookkeeper.....	G A Rogers.....	16 67
1	1058	Maintenance.....	Labor.....	G A Rogers.....	98 00
1	1059	Maintenance.....	Steward.....	B Shisa.....	150 00
1	1060	Medical attendance.....	Surgeon.....	J D Read.....	100 00
1	1061	Experiment station.....	Amount overdrawn.....	Agri experiment station...	227 50
1	1062	Fence.....	Labor.....	Frank McInnis.....	15 00
1	1063	Veterinary department.....	Labor.....	Frank McInnis.....	27 00
1	1064	Veterinary department.....	Labor.....	Agricultural department...	25 00
1	1065	Fence.....	Barb wire.....	Sauborn & Warner.....	44 18
1	1066	Repairs.....	Kalsomine.....	Garth, Nash & Robinson...	2 40
1	1067	Repairs.....	Kalsomine.....	Geo W Norrili.....	65
1	1068	Austin Hall (Fur).....	Joint pipe and elbows.....	Wm Koppe.....	23 00

## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Mar.					
1	1069	Professors' houses .....	Hardware .....	Wm Koppe .....	\$ 40
1	1070	Water supply .....	Pitcher, pumps and pipe .....	J S Brown .....	10 45
1	1071	Engineering department .....	Win 2 divider .....	Wm Koppe .....	65
1	1072	Farm implements (Agrl) .....	Cultivators and harrow .....	L M Knutsey & Co .....	22 33
1	1073	Engineering department .....	Bottle of sweet oil .....	Geo W Norrill .....	25
1	1074	Drawing department .....	Materials .....	F W DeVoe & Co .....	41 13
1	1075	Veterinary department .....	Chemicals .....	G W Norrill .....	3 50
1	1076	Veterinary department .....	Halter and bridle .....	Hanway & Son .....	1 25
1	1077	Veterinary department .....	Hardware .....	Wm Koppe .....	6 50
1	1078	Veterinary department .....	Sec of bone and teeth .....	F O Jacobs .....	9 00
1	1079	Veterinary department .....	Drugs .....	N Vanderbelt .....	3 08
1	1080	Furniture .....	Tables .....	Tyler Desk Co .....	70 11
1	1081	Fence .....	Nails .....	Wm Koppe .....	3 25
1	1082	Agricultural department .....	Labor .....	F McInnis .....	3 00
1	1083	Mechanical department .....	Lumber .....	Garth, Nash & Robinson .....	8 64
1	1084	Expense board of directors .....	Trip to Austin .....	C C Garrett .....	12 10
1	1085	Agricultural department (cream) .....	Hardware .....	G M Dilley & Son .....	12 35
1	1086	Agricultural department (rem) .....	Students' labor .....	J F Duggar .....	56 75
1	1087	Agricultural dept (bull barn) .....	Lumber .....	Garth, Nash & Robinson .....	12 30
1	1088	Farmer Institute .....	Trip to Austin .....	M F Lucis .....	15 90
1	1089	Agricultural department .....	Repairs .....	A Oswald .....	7 40
1	1090	Chemical department .....	Vaseline oil .....	G W Norrill .....	85
1	1091	Mechanical dept (forge shop) .....	Coal .....	Wm Koppe .....	7 00
1	1092	Chemical department .....	Gasometer and beakers .....	James W Queen & Co .....	32 31
1	1093	Campus .....	Rope .....	Wm Koppe .....	1 60
1	1094	Campus .....	Harness .....	Hanway & Son .....	1 50
1	1095	Advertisement .....	Advertising college .....	The Mercury .....	5 00
1	1096	Expense .....	Telegram .....	W U Telegraph Co .....	25
1	1097	Expense .....	Advertising college .....	Ass American A & M Co .....	25 00
1	1098	Expense .....	Wire .....	Wm Koppe .....	84
1	1099	Expense .....	Stationery .....	G W Norrill .....	3 70
1	1100	Refunded .....	Absence .....	J W G ay .....	15 00
1	1101	Expense .....	Trip to Houston and Austin .....	L L McInnis .....	37 27
1	1102	Maintenance .....	Dippers .....	Wm Koppe .....	1 50
1	1103	Maintenance .....	Gasoline and oil .....	Waters-Pierce Oil Co .....	194 42
1	1104	Maintenance .....	Groceries .....	Carson, Sewall & Co .....	71 44
1	1105	Farmer Institute .....	Trip to Austin .....	G W Curtis .....	15 85
1	1106	Expense .....	Repairing telephone .....	A Horbers .....	13 13
1	1107	Fence .....	Gates .....	A G Hulbert .....	12 40
1	1108	Book store .....	Books .....	Timothy Mowney .....	6 00
1	1109	Mechanical department .....	Borax .....	G W Norrill .....	35
1	1110	Agricultural department .....	Cultivator .....	Gale Manufacturing Co .....	10 35
1	1111	Salary .....	College carpenter .....	C A Lewis .....	60 00
1	1112	Expense .....	Telegrams .....	W U Telegraph Co .....	2 90
1	1113	Maintenance .....	Groceries .....	Carson, Sewall & Co .....	86 17
1	1114	Book store .....	Books .....	A S Barnes .....	38 88
1	1115	Water supply .....	Cistern .....	Peter Winter .....	45 00
1	1116	Maintenance .....	Wood .....	J H Subers .....	34 50
1	1117	Maintenance .....	Mess hall expenses .....	B Sbia .....	490 51
2	1118	Agricultural department .....	One flow .....	L F Fuller .....	15 50
2	1119	Veterinary department .....	Sundries .....	James W Queen .....	25 39
3	1120	Library .....	Newspapers .....	G A Rogers .....	28 25
4	1121	Advertising and printing .....	Advertising college .....	Au ti C unty Times .....	5 00
4	1122	Agricultural department .....	Cotton seed .....	John Stokley .....	12 55
4	1123	Agricultural department .....	Farm hands .....	J H Alsworth .....	113 60
4	1124	Chemical department .....	Plat disk remade .....	Jas W Queen & Co .....	3 10
4	1125	Agricultural department .....	Sorghum seed .....	B L D nglas .....	11 70
4	1126	Chemical department .....	Air pump repaired .....	Emil Geitner .....	1 00
5	1127	Maintenance .....	Beef .....	W C Boyett .....	192 30
5	1128	Expense .....	Stamps and envelopes .....	W C Boyett .....	42 05
5	1129	Agricultural department .....	Cutting and hemming one doz towels for creamery .....	Mrs I C Ellis .....	50
5	1130	Maintenance .....	28 bus white meal .....	L A Scott .....	21 00
6	1131	Assembly Hall .....	Unloading and hauling brick .....	Jim Mitchell .....	5 45
6	1132	Maintenance .....	Express .....	Wells, Fargo & Co .....	34 83
6	1133	Expense .....	Express .....	Wells, Fargo & Co .....	1 30
6	1134	Horticultural department .....	Express .....	Wells, Fargo & Co .....	80
6	1135	Drawing department .....	Express .....	Wells, Fargo & Co .....	2 75



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Mar.					
6	1136	Chemistry.....	Express.....	Wells-Fargo Express Co....	\$1 00
6	1137	Civil engineer.....	Express.....	Wells-Fargo Expr ss' o....	1 30
6	1138	Austin Hall.....	5th payment on Austin Hall.	Garth, Nash & Robinson...	1500 00
7	1139	Horticultural department....	1 month's board for two men.	J F McKay.....	22 00
9	1140	Agricultural department....	Cotton seed.....	F M Arnold.....	2 65
9	1141	Expense.....	Printing.....	Brazos Pilot.....	11 75
9	1142	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	247 35
9	1143	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	4 40
9	1144	Maintenance.....	Flour.....	Texas Mill & Elevator Co....	91 93
12	1145	Maintenance.....	Labor.....	Peter Sawicke.....	37 50
12	1146	Maintenance.....	Slop cans.....	Joseph Locke.....	1 20
12	1147	Mechanical department.....	Lumber.....	Garth, Nash & Robinson...	5 74
12	1148	Expense.....	Drugs.....	Geo W Norrill.....	2 40
12	1149	Chemical department.....	Drugs.....	Geo W Norrill.....	2 25
12	1150	Maintenance.....	Brooms.....	Carson, S-w-all & Co.....	5 00
12	1151	Refunded.....	Absence.....	D S Learne.....	10 00
15	1152	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	39 30
16	1153	Agricultural department.....	Labor.....	J H Alsworth.....	4 00
16	1154	Repairs.....	Labor.....	Peter Winter.....	3 65
16	1155	Repairs.....	Labor.....	Peter Winter.....	5 60
16	1156	Professors' houses.....	Labor.....	Peter Winter.....	3 40
16	1157	Water supply.....	Labor.....	Peter Winter.....	67 65
23	1158	Library.....	Matting.....	H Waddell.....	26 00
20	1159	Maintenance.....	Wood.....	J H Subers, Jr.....	13 95
21	1160	Assembly Hall.....	Freight.....	H & T C Ry Co.....	20 00
21	1161	Assembly Hall.....	Freight.....	H & T C Ry Co.....	60 00
21	1162	Work, stock and farm imp.....	Freight.....	H & T C Ry Co.....	28
21	1163	Expense.....	Freight.....	H & T C Ry Co.....	1 78
21	1164	Veterinary department.....	Freight.....	H & T C Ry Co.....	1 41
22	1165	Refunded.....	Over charged.....	C A Morgan.....	4 00
23	1166	Furniture (office and parlor)...	Carpets, etc.....	H Waddell.....	247 67
23	1167	Furniture.....	Carpets, matting, etc.....	H Waddell.....	148 88
23	1168	Medical attendance.....	Hospital steward.....	J H Subers.....	15 00
23	1169	Assembly Hall.....	Hauling bricks.....	Jim Mitchell.....	4 00
23	1170	Assembly Hall.....	Hauling sand and bricks.....	J H Subers.....	12 53
23	1171	Assembly Hall.....	Hauling sand.....	John Hendrick.....	2 50
23	1172	Expense.....	Agent's warrants and colors...	Clarke & Courts.....	5 75
23	1173	Maintenance.....	Putz pomade.....	G W Norrill.....	50
23	1174	Expense.....	Exchange.....	1st National Bank, Bryan...	29 33
23	1175	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	6 00
23	1176	Board of Directors.....	Traveling expenses.....	A J Rose.....	14 60
23	1177	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	39 30
23	1178	Veterinary department.....	Microscopes.....	Bausch & Lomb Opt Co....	33 00
23	1179	Bookstore.....	Books.....	Bausch & Lomb Opt Co....	22 35
23	1180	Agricultural department.....	Peas.....	S Meyers.....	81 47
23	1181	Agricultural department.....	Students' labor.....	J F Duggar.....	28 30
23	1182	Horticultural department.....	Seed.....	Plant and Seed Co.....	2 42
23	1183	Library.....	Lumber.....	Garth, Nash & Robinson...	1 89
23	1184	Library.....	Hardware.....	Wm Ko pe.....	6 03
23	1185	Library.....	Hardware.....	J S Brown Hardware Co....	6 37
23	1186	Book store.....	Books.....	B Westerman.....	155 44
23	1187	Eng and physics.....	Forgings.....	George M Dille.....	30 42
23	1188	Chemical department.....	Blow-p pe wire.....	Eimer & Amend.....	4 42
23	1189	Book store.....	Drawing material.....	Jas W Queen & Co.....	39 27
23	1190	Book store.....	Books.....	Macmillan & Co.....	14 34
23	1191	Book store.....	Books.....	L L Barnes & Co.....	9 72
23	1192	Expense.....	Traveling expenses.....	L L McInnis.....	17 90
23	1193	Library.....	Newspapers.....	G A Rogers.....	19 90
22	1194	Agricultural department.....	Freight.....	H & T C Ry.....	1 46
25	1195	Assembly Hall.....	Freight.....	H & T C Ry.....	50 09
26	1196	Austin Hall.....	Lumber.....	Garth, Nash & Robinson...	308 15
26	1197	Professors' cottages.....	Labor.....	Garth, Nash & Robinson...	230 00
27	1198	Mechanical department.....	Drills and reamer.....	Cleveland Twist Drill Co...	45 28
30	1199	Assembly Hall.....	Hauling brick.....	J D Armstrong.....	6 00
29	1200	Assembly Hall.....	Hauling sand.....	J D Arm strong.....	6 66
30	1201	Assembly Hall.....	Hauling brick.....	Jim Mitchell.....	6 80
Apr.					
1	1202	Salaries.....	Professor of mathematics.....	L L McInnis.....	294 44



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Mar.					
30	1203	Assembly Hall .....	Hauling sand.....	W J Moore.....	\$31 45
30	1204	Expense.....	Traveling expenses.....	T M Scott.....	14 05
Apr.					
1	1205	Maintenance.....	Drummer and janitors .....	G A Rogers.....	116 00
1	1206	Salaries .....	Prof of Languages.....	R Wippricht.....	222 22
1	1207	Salaries .....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
1	1208	Salaries .....	Prof of Agriculture.....	G W Curtis.....	166 66
1	1209	Salaries .....	Prof of Chemistry and Min.....	H H Harrington.....	166 66
1	1210	Salaries .....	Prof of Hort and Bottany.....	T L Brunk.....	111 11
1	1211	Salaries .....	Prof of Civil Eng and Phys.....	J H Kimaly.....	111 11
1	1212	Salaries .....	Prof of Veterinary Science.....	M Francis.....	55 55
1	1213	Salaries .....	Associate Prof of English.....	W L Brnghurst.....	250 00
1	1214	Salaries .....	Adjunct Prof of Math.....	F F Smith.....	111 11
1	1215	Salaries .....	Instructor in drawing.....	F E Giesecke.....	75 00
1	1216	Salaries .....	Asst Prof of English.....	W B Philpott.....	60 00
1	1217	Salaries .....	Chaplain .....	C P Fountain.....	100 00
1	1218	Salaries .....	Agent of board.....	T M Sco t.....	62 50
1	1219	Salaries .....	Asst Prof of Mechanical Eng.....	P Braun.....	50 00
1	1220	Salaries .....	Inst of blacksmithing.....	A M Guenther.....	50 00
1	1221	Salaries .....	Asst Prof of Chem and Phys.....	D Adriance.....	33 33
1	1222	Salaries .....	Asst Prof of Agriculture.....	J F Duggar.....	33 33
1	1223	Salaries .....	Asst Prof Hort and Bottany.....	J L McKay.....	33 33
1	1224	Salaries .....	Foremen of farm.....	J H Alsworth.....	66 66
1	1225	Salaries .....	Gardener.....	G E Eberpocher.....	41 66
1	1226	Salaries .....	Foreman of shop.....	C A Lewis.....	60 00
1	1227	Salaries .....	Instructor of Mathematics.....	Guy Carleton.....	20 00
1	1228	Salaries .....	Surgeon .....	J D Read.....	100 00
1	1229	Maintenance .....	Steward .....	B Sbsa.....	150 00
1	1230	Expense .....	Bookkeeper.....	G A Rogers.....	16 67
1	1231	Agricultural department.....	Labor .....	J H Alsworth.....	110 00
1	1232	Maintenance .....	Supplies.....	B Sbsa.....	527 39
2	1233	Maintenance .....	Beef.....	W C Boyett.....	211 61
1	1234	Expense .....	Stamps.....	W C Boyett.....	8 00
2	1235	Mechanical department.....	Hardware .....	Jos F Meyer.....	6 65
3	1236	Maintenance .....	Wood .....	J H Subers, Jr.....	36 05
3	1237	Printing and advertising.....	Advertising college.....	Texas Baptist and Herald.....	10 15
6	1238	Mechanical department.....	Stoves.....	F H Parker.....	3 83
6	1239	Assembly Hall .....	Hauling brick.....	Wm Emanuel.....	1 25
6	1240	Assembly Hall .....	Hauling brick.....	Robert Noel.....	4 80
6	1241	Imp campus.....	Labor and board.....	T L B uttk.....	12 86
6	1242	Veterinary department.....	Express .....	Wells, Fargo & Co.....	70
6	1243	Chemical department.....	Express.....	Wells, Fargo & Co.....	70
6	1244	Expense .....	Express.....	Wells, Fargo & Co.....	85
6	1245	Horticultural department.....	Express.....	Wells, Fargo & Co.....	1 05
6	1246	Agricultural department.....	Labor .....	J H Alsworth.....	6 85
6	1247	Maintenance .....	Express.....	Wells, Fargo & Co.....	45 17
6	1248	Horticultural department.....	Work .....	T L Brunk.....	36 51
6	1249	Agricultural department.....	Express.....	Wells, Fargo & Co.....	1 65
8	1250	Maintenance .....	Oil.....	Waters-Pierce Oil Co.....	166 14
8	1251	Maintenance .....	Flour.....	Texas Mill and Elevator Co.....	121 73
8	1252	Maintenance .....	Groceries.....	Carson, Sewall & Co.....	244 35
8	1253	Furniture .....	Two parlor suits.....	H Waddell.....	191 95
8	1254	Agricultural department.....	Repairs.....	Wm Koppe.....	50
8	1255	Agricultural department.....	Oil.....	G W Norrill.....	90
8	1256	Agricultural department.....	One peck corn.....	Waxahachi Grain & Im Co.....	50
8	1257	Agricultural department.....	Millet and sorghum seed.....	Garth, Nash & Robinson.....	10 47
8	1258	Agricultural department.....	Dairy goods.....	Edwin Montgomery.....	10 24
8	1259	Agricultural department.....	Harness .....	Hanway & Son.....	3 50
8	1260	Agricultural department.....	Student labor.....	J F Duggar.....	31 75
8	1261	Civil Engineering.....	Blinds.....	Garth, Nash & Robinson.....	10 00
8	1262	Chemical department.....	Drugs.....	G W Norrill.....	2 35
8	1263	Chemical department.....	15 yards crash.....	Wm Koppe.....	1 50
8	1264	Repairs .....	Glue and putty.....	G W Norrill.....	1 65
8	1265	Repairs.....	Chairs .....	Charles Wiluski.....	1 00
9	1266	Expense .....	Telegrams.....	Western Union Tel Co.....	1 50
9	1267	Delegates to convention.....	Expense A & M Convention.....	M Francis.....	15 80
9	1268	Bookstore .....	Screw for pen.....	J W Queen & Co.....	1 75
9	1269	Expense.....	Rush locks.....	H W Merrill.....	2 50

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Apr.					
9	1270	Book store.....	Paper .....	E Morrison .....	\$10 75
9	1271	Advertising and printing.....	Advertising college.....	C H Evans & Co.....	5 00
9	1272	Imp campus.....	Painting telephone post.....	George Petz n.....	3 00
9	1273	Expense.....	Circulars.....	Clark & Courts.....	7 25
9	1274	Furniture.....	Chairs.....	R Mitchell Furniture Co.....	3 00
9	1275	Exp use.....	Locks and ceiling.....	F E Giesecke.....	2 95
9	1276	Veterinary department.....	Hardware .....	Charles Turax & Co.....	12 15
9	1277	Bookstore.....	Books .....	G G Groff.....	7 88
9	1278	Library .....	Hardware .....	J S Brown.....	6 60
9	1279	Agricultural department.....	Blacksmithing.....	A Oswald.....	1 00
10	1280	Maintenance.....	Laundry.....	Excelsior Steam Laundry..	75 00
10	1281	Assembly Hall.....	Part payment.....	A Baunbach.....	1000 00
11	1282	Assembly Hall.....	Hauling brick.....	Pursey Davis.....	6 00
13	1283	Assembly Hall.....	Hauling sand.....	W J Moore.....	35 25
13	1284	Assembly Hall.....	Hauling brick.....	J Green.....	15 90
18	1285	Medical attendance.....	Hospital steward.....	J H Subers.....	15 00
18	1286	Repairs.....	Labor .....	George Pletzen.....	26 00
19	1287	Agricultural department.....	Cotton seed.....	M S Wallace.....	2 95
20	1288	Library .....	New-papers .....	F A Rogers.....	14 00
20	1289	Autin Hall.....	Labor .....	Percy Davis.....	9 40
20	1290	Agricultural department.....	Labor .....	J H Alworth.....	5 60
22	1291	Agricultural department.....	Labor .....	L E Colby.....	21 00
22	1292	Expense of board.....	Traveling expense.....	L L Foster.....	13 55
22	1293	Expense of board.....	Traveling expense.....	J D Fields.....	13 10
22	1294	Expense of board.....	Traveling expense.....	W R Cavitt.....	11 20
24	1295	Library .....	Books .....	Chas Scribner's Sons.....	20 00
24	1296	Campus.....	Freight .....	H & C Ry Co.....	5 24
24	1297	Maintenance.....	Corn meal.....	L A Scott.....	16 12
24	1298	Maintenance.....	Laundry.....	Excelsior Laundry Co.....	36 69
24	1299	Maintenance.....	Potatoes .....	Carson, Sewal & Co.....	19 26
24	1300	Expense.....	Calagraph ribbons.....	J J Pastoriza.....	6 00
24	1301	Campus.....	Blacksmithing.....	A Oswald.....	4 10
24	1302	Mechanical department.....	Lead.....	G W Norrill.....	10
24	1303	Library.....	Lumber.....	Garth, Nash & Robinson..	20 24
24	1304	Mechanical department.....	Lumber.....	Garth, Nash & Robinson..	10 08
24	1305	Expense.....	Traveling expense.....	L L McInnis.....	5 35
24	1306	Mechanical department.....	Hardware .....	Wm Koppe.....	1 58
24	1307	Agricultural department.....	Hardware .....	Wm Koppe.....	7 80
24	1308	Mechanical department.....	Hardware .....	Wm Koppe.....	1 10
24	1309	Repairs.....	Nails.....	Garth, Nash & Robinson..	9 05
24	1310	Expense.....	1,000 blank drafts.....	Brazos Pilot.....	3 00
24	1311	Campus.....	Repairing harness.....	Hanway & Son.....	1 50
24	1312	Expense.....	Oil.....	W Norrill.....	1 00
24	1313	Library .....	Book.....	N D McDonald & Co.....	6 00
24	1314	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	13 60
27	1315	Agricultural department.....	Labor .....	J H Alworth.....	16 87
27	1316	Maintenance.....	Wood.....	J H Subers, Jr.....	18 60
27	1317	Assembly Hall.....	Hauling brick.....	Percy Davis.....	3 80
May					
1	1318	Salaries .....	Prof of Mathematics.....	L L McInnis.....	294 44
1	1319	Salaries .....	Prof of English.....	W L Bringham.....	250 00
1	1320	Salaries .....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
1	1321	Salaries .....	Prof of Languages.....	R Wipprecht.....	222 22
1	1322	Salaries .....	Prof of Agriculture.....	G W Curtis.....	166 66
1	1323	Salaries .....	Prof of Chem and Min.....	H H Harrington.....	166 66
1	1324	Salaries .....	Prof of Hort and Botany.....	T L Bunk.....	111 11
1	1325	Salaries .....	Prof of Civil Eng and Phys.....	J H Kenaly.....	111 11
1	1326	Salaries .....	Prof of Veterinary Science.....	M Francis.....	55 55
1	1327	Salaries .....	Adjunct Prof Mathematics.....	R F Smith.....	111 11
1	1328	Salaries .....	Instructor in Drawing.....	F E Giesecke.....	75 00
1	1329	Salaries .....	Asst Prof of Eng and Hist.....	W B Philpott.....	60 00
1	1330	Salaries .....	Agent of Board of Director ..	T M Scott.....	62 50
1	1331	Salaries .....	Chaplain.....	C P Foote.....	100 00
1	1332	Salaries .....	Asst Prof Chem and Phys.....	D Adrance.....	33 33
1	1333	Salaries .....	Asst Prof of Hort and Botany.....	J F McKay.....	33 33
1	1334	Salaries .....	Asst Prof Agriculture.....	J F Dugan.....	33 33
1	1335	Salaries .....	Asst Prof Mechanical Eng.....	P Braun.....	50 00
1	1336	Salaries .....	Instructor blacksmithing.....	A M Guenther.....	50 00

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
May					
1	1337	Salaries.....	Foreman of shop.....	C A Lewis.....	\$60 00
1	1338	Salaries.....	Foreman of farm.....	J H Alsworth.....	66 66
1	1339	Salaries.....	Gardner.....	G E Eberspacher.....	41 66
1	1340	Maintenance.....	Stewart.....	B Sbisa.....	150 00
1	1341	Medical attendance.....	Surgeon.....	J D Read.....	100 00
1	1342	Expense.....	Bookkeeper.....	G A Meyer.....	16 66
Apr.	1343	Assembly Hall.....	Part payment.....	A Baumbach.....	1000 00
29	1344	Library.....	Newspapers.....	Kuickerbocker Sub Agency	75 20
May					
1	1345	Maintenance.....	Janitors.....	G A Rogers.....	96 00
2	1346	Veterinary department.....	Hauling.....	Agricultural department.....	8 40
2	1347	Farmers' Institute.....	Expense.....	M Francis.....	2 00
2	1348	Assembly Hall.....	Right of way.....	Ge rh Simons.....	5 00
2	1349	Expense.....	Corner-stone orator.....	R C Beale.....	9 75
2	1350	Expense.....	Exchange.....	First Nat Bank, Bryan.....	9 32
2	1351	Expense.....	Telegrams.....	W W Harris.....	2 25
2	1352	Expense.....	Envelopes.....	J J Pastoriza.....	3 75
2	1353	Agricultural department.....	Labor.....	J H Alsworth.....	76 35
2	1354	Agricultural department.....	Two cans for creamery.....	J B Reed.....	4 80
2	1355	Drawing department.....	Gum arabic.....	Geo W Norrill.....	10
2	1356	Mechanical department.....	One doz screws.....	Wm Koppe.....	15
2	1357	Chemical department.....	Repairs.....	Wm K pps.....	1 50
2	1358	Chemical department.....	Supplies.....	Jas W Queen & Co.....	150 88
2	1359	Maintenance.....	Ice.....	Anheuser, Busch & Co.....	29 39
2	1360	Maintenance.....	Flour.....	Texas Mill & Elevator Co.....	202 21
2	1361	Maintenance.....	Hardware.....	J S Brown Hardware Co.....	10 97
2	1362	Maintenance.....	Corn meal.....	L A S ott.....	20 65
2	1363	Maintenance.....	Laundry.....	Excelsior Laundry.....	75 00
2	1364	Military department.....	Drum heads.....	M C Lilly.....	5 20
2	1365	Maintenance.....	Supplies.....	B Sbisa.....	593 19
4	1366	Agricultural department.....	Student labor.....	J F Doggar.....	35 25
4	1367	Agricultural department.....	Labor.....	J H Alsworth.....	21 25
4	1368	Agricultural department.....	Cotton seed.....	C Gr ham.....	3 10
6	1369	Horticultural department.....	Board for two hands.....	Mrs J H Alsworth.....	2 00
7	1370	Horticultural department.....	Express.....	Wells-Fargo Expr ss Co.....	35
7	1371	Mechanical department.....	Express.....	Wells-Fargo Express Co.....	25
7	1372	Maintenance.....	Express.....	Wells-Fargo Express Co.....	41 28
8	1373	Horticultural department.....	Labor.....	T L Brunk.....	61 05
8	1374	Maintenance.....	Supplies.....	Carson, Sewell & Co.....	315 16
8	1375	Repairs.....	Lumber.....	Garth, Nash & Robinson.....	23 79
8	1376	Maintenance.....	Laundry.....	Excelsior Laundry.....	38 40
8	1377	Maintenance.....	Glassware.....	Z Emmich.....	17 40
8	1378	Campus.....	Road machine and scraper.....	R F Smith.....	192 75
8	1379	Expense.....	Box rent.....	John I Tabon.....	1 00
10	1380	Maintenance.....	Beef.....	Wm Boyett.....	232 06
11	1381	Agricultural department.....	Labor.....	J H Alsworth.....	17 85
13	1382	Expense.....	Telephone instruments.....	Telegraph Co.....	60 00
14	1383	Library.....	Fitting up library.....	Fink & Braetz.....	160 00
14	1384	Assembly Hall.....	Part payment.....	A Baumbach.....	2500 00
14	1385	Maintenance.....	Laundry.....	Excel ior Laundry.....	36 60
17	1386	Agricultural department.....	Labor.....	J H Alsworth.....	3 90
18	1387	Medical attendance.....	Hospital steward.....	J H Subers.....	15 00
21	1388	Maintenance.....	Laundry.....	Excelsior Laundry.....	37 80
21	1389	Repairs.....	Work.....	A Habess.....	2 00
June					
1	1390	Salaries.....	Prof of Math and Chem.....	L L McInnis.....	294 44
1	1391	Salaries.....	Prof of Eng and History.....	W L Bringham.....	250 00
1	1392	Salaries.....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
1	1393	Salaries.....	Prof of Languages.....	R Whipprecht.....	222 22
1	1394	Salaries.....	Prof of Agriculture.....	G W Curtis.....	166 66
1	1395	Salaries.....	Prof of Chem and Min.....	H H Harrington.....	166 66
1	1396	Salaries.....	Prof of Art and Botany.....	T L Brunk.....	111 11
1	1397	Salaries.....	Prof of Civil Eng and Phys.....	J F Kimaly.....	111 11
1	1398	Salaries.....	Prof of Veterinary Science.....	M Francis.....	55 55
1	1399	Salaries.....	Adj Prof of Mathematics.....	R F Smith.....	111 11
1	1400	Salaries.....	Instructor of Drawing.....	F E Giesiecke.....	75 00
1	1401	Salaries.....	Asst Prof Eng and History.....	W B Philpott.....	60 00



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
June					
1	1402	Salaries .....	Instructor of blacksmithing.....	A M Guenther.....	\$50 00
1	1403	Salaries .....	Asst Prof of Mechanical Eng.....	P Brann.....	50 00
1	1404	Salaries .....	Asst Prof of Chem and Phys.....	D Adriance.....	33 33
1	1405	Salaries .....	Captain .....	C P Fountain.....	100 00
1	1406	Salaries .....	Agent of board.....	T M Scott.....	62 50
1	1407	Salaries .....	Asst Prof of agriculture.....	J F Dugga.....	33 33
1	1408	Salaries .....	Asst Prof of horticulture.....	J F McKay.....	33 33
1	1409	Medical attendance.....	Surgeon .....	J D Read.....	100 00
1	1410	Salaries .....	Ass Prof mathematics.....	Guy Carleton.....	20 00
1	1411	Expense .....	Bookkeeper .....	G A Rogers.....	16 67
1	1412	Maintenance .....	Janitors .....	G A Rogers.....	96 00
1	1413	Maintenance .....	Steward .....	B Sbia.....	150 00
1	1414	Salaries .....	Foreman of shop.....	C A Lewis.....	60 00
1	1415	Salaries .....	Gardener.....	G E Eberspacher.....	41 66
1	1416	Salaries .....	Foreman of farm.....	J H Alworth.....	66 66
1	1417	Salaries .....	Asst Librarian.....	W B Philpott.....	25 00
May					
23	1418	Maintenance .....	Freezer with fly wheel.....	J Brown.....	15 80
23	1419	Maintenance .....	Oil.....	Waters-Pierce Oil Co.....	94 45
23	1420	Maintenance .....	Peaches .....	Carson, Sewall & Co.....	3 00
23	1421	Expense .....	Trip to Galveston and Austin.....	L L McInnis.....	18 45
23	1422	Chemical department.....	Oil.....	G W Norrill.....	3 50
23	1423	Mechanical department.....	Pai t and brushes.....	G W Norrill.....	4 60
23	1424	Agricultural department.....	Repairs.....	A Oswald.....	2 90
23	1425	Agricultural department.....	Lumber .....	Garh, Nash & Robinson.....	3 52
23	1426	Agricultural department.....	Buckey Pitman .....	L T Fuller.....	2 25
23	1427	Agricultural department.....	Liv salt.....	Carson, Sewall & Co.....	4 40
23	1428	Agricultural department.....	Liv M Cyl oil.....	G W Norrill.....	1 65
23	1429	Books .....	Printing .....	Clark & Courts.....	18 50
23	1430	Mechanical department.....	Gross screws and solder.....	Wm Koppe.....	1 00
25	1431	Maintenance .....	Beef.....	Wm Boyett.....	158 17
27	1432	Agricultural department.....	Labor .....	J F Dugga.....	34 50
27	1433	Agricultural department.....	Labor .....	J H Alworth.....	71 00
27	1434	Mechanical department.....	Students' labor.....	Paul Brow.....	6 35
27	1435	Maintenance .....	Mess hall expenses.....	B Sbia.....	398 28
27	1436	Maintenance .....	Oil.....	Waters-Pierce Oil Co.....	3 00
27	1437	Experiment station.....	Balance due station.....	Agricultural Ex Station.....	195 14
27	1438	Horticultural department.....	Labor .....	T L Bruuk.....	47 50
29	1439	Experiment station.....	Balance due station.....	L L McInnis.....	27 60
June					
1	1	Agricultural department.....	Labor .....	J H Alworth.....	11 45
5	2	Agricultural department.....	Student labor.....	J F Dugga.....	11 40
6	3	Campus .....	Labor .....	Robert Webster.....	4 40
6	4	Maintenance .....	Express .....	Wells-Fargo Express Co.....	32 95
6	5	Chemical department.....	Express .....	Wells-Fargo Express Co.....	80
6	6	Expense .....	Express .....	Wells-Fargo Express Co.....	1 90
6	7	Repairs .....	Express .....	Wells-Fargo Express Co.....	1 75
6	8	Expense of Board Directors.....	Traveling expenses.....	J D Field.....	20 15
6	9	Expense of Board Directors.....	Traveling expenses.....	L L Foster.....	11 50
6	10	Expense of Board Directors.....	Traveling expenses.....	A J Rose.....	19 10
6	11	Expense of Board Directors.....	Traveling expenses.....	W R Cavitt.....	10 20
7	12	Repairs .....	Work on stable.....	Frank McInnis.....	3 05
7	13	Fence .....	Gates.....	Frank McInnis.....	1 80
7	14	Agricultural department.....	Hay rack.....	Frank McInnis.....	10 00
8	15	Mechanical department.....	Student labor.....	R H Whitlock.....	1 50
10	16	Maintenance .....	Dry goods.....	Mistro & Bros.....	2 00
10	17	Maintenance .....	Climbueys.....	Wm Koppe.....	80
10	18	Mechanical department.....	Nails.....	Wm Koppe.....	20
10	19	Mechanical department.....	Material .....	G W Norrill.....	3 90
10	20	Expense .....	Mess es.....	Western Union Tel Co.....	3 60
10	21	Expense .....	Dry goods.....	Cole Bros.....	3 00
10	22	Agricultural department.....	Freight .....	G W Curtis.....	68
10	23	Library .....	Glass.....	G W Norrill.....	6 80
10	24	Veterinary department.....	Dry goods.....	Cole Bros.....	1 43
10	25	Horticultural department.....	Labor .....	T L Bruuk.....	51 50
10	26	Horticultural department.....	Rope .....	Cole Bros.....	55
10	27	Horticultural department.....	Lumber .....	Garh, Nash & Robinson.....	18 80
10	28	Horticultural department.....	Twine.....	Wm Koppe.....	40



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
June					
10	29	Horticultural department....	Seed potatoes, onions, etc.....	J W English.....	\$21 50
10	30	Repairs.....	Work on windows .....	Pletzer.....	13 00
10	31	Campus.....	Saath.....	Wm Koppe.....	1 00
10	32	Campus.....	Repairs.....	Hanway & Son.....	75
10	33	Expense.....	Repairs.....	Hanway & Son.....	1 50
10	34	Repairs.....	Stairway.....	A Oswald.....	2 93
10	35	Repairs.....	Bolts.....	Wm Koppe.....	2 90
10	36	Repairs.....	Lumber.....	Garth, Nash & Robinson.....	5 55
10	37	Maintenance.....	Laundry.....	Excelsior Laundry.....	73 30
10	38	Maintenance.....	Groceries.....	Carson, S wall & Co.....	104 88
10	39	Maintenance.....	Oil.....	Walters-Pier e Oil Co.....	10 61
10	40	Chemical department.....	Equipment.....	J W Queen & Co.....	14 85
10	41	Printing.....	Printing agent's warrants.....	Clark & Courts.....	17 40
10	42	Agricultural department.....	Tubs.....	H McK Wilson & Co.....	4 54
10	43	Repairs.....	Hardware.....	J S Brow Hardware Co.....	11 31
10	44	Advertising and printing.....	Views of college, etc.....	G M Deane.....	37 50
10	45	Salaries.....	Till sockets and chairs.....	J S Brown Hardware Co.....	4 84
10	46	Salaries.....	Encyclopedia (Britanic).....	M D McDonald & Co.....	6 00
10	47	Advertising and printing.....	College advertisement.....	Palestine Advocate.....	3 50
10	48	Fence.....	Ornament acorn fittings.....	F Von Wickle.....	4 77
10	49	Expense.....	Programme.....	J J Pastoriza.....	11 35
10	50	Horticultural department.....	Eureka sprayer.....	Adams, Webb & Son.....	28 20
10	51	Horticultural department.....	Potatoes.....	Plant Seed Co.....	9 06
10	52	Repairs.....	Hartshorn rollers.....	H Waddell.....	6 45
10	53	Medical attendance.....	Steward of hospital.....	J H Subers.....	8 00
10	54	Maintenance.....	Wood.....	J H Subers, Jr.....	4 62
10	55	Mechanical department.....	Wood.....	J H Subers, Jr.....	5 40
11	56	Maintenance.....	Pay roll.....	G A Rogers.....	12 00
11	57	Postage.....	Stamps.....	W C Boyett.....	3 00
11	58	Agricultural department.....	Ilk.....	T T Goodwin.....	4 50
11	59	Expense.....	Commencement preacher.....	Rev T B Lee.....	25 05
11	60	Expense.....	Commencement exercises.....	Rev T B Lee.....	49 13
12	61	Expense.....	Bookkeeper.....	G A Rogers.....	8 36
12	62	Repairs.....	Wall paper.....	Gas Bute.....	37 20
12	63	Mechanical department.....	Lard oil.....	G W Norrill.....	95
12	64	Assembly Hall.....	Supplement for payment.....	A Baumbach.....	12878 55
12	65	Assembly Hall.....	Fifth payment on contract.....	A Baumbach.....	500 00
12	66	Expense.....	Exchange.....	First Nat Bank, Bryan.....	35 19
17	67	Expense.....	Trin to Austin.....	L L McEnnis.....	8 45
18	68	Repairs.....	Painting.....	G Pletzer.....	32 90
22	69	Water supply.....	Cistern.....	Peter Winter.....	20 00
24	70	Expense.....	Money advanced to Exp Co.....	D Ad lance.....	49
24	71	Fence.....	Pasture fence.....	J H Subers, Jr.....	25 00
July					
1	72	Salary.....	Instruction in blacksmithing.....	A M Guenther.....	50 00
1	73	Chemical department.....	Pipes and gas in Chem Lab.....	A Harb r.....	45 50
1	74	Chemical department.....	Glassware.....	H & T C Ry Co.....	1 94
1	75	Maintenance.....	Washing.....	Excelsior Laundry.....	37 80
1	76	Salary.....	Services as garden r.....	G E Eberspacher.....	41 66
1	77	Maintenance.....	Salary.....	B Sbisa.....	50 00
1	78	Salary.....	Foreman of farm.....	J H Alsworth.....	66 66
1	79	Salary.....	Foreman of carpenter shop.....	C A Lewis.....	60 00
1	80	Water supply.....	Sixth pay on cistern.....	P Winter.....	30 00
1	81	Agricultural department.....	Spern oil.....	G W Norrill.....	1 75
1	82	Agricultural department.....	Salaries.....	J H Alsworth.....	102 62
1	83	Expense.....	Telephone.....	W W Harris.....	25 00
1	84	Chemical department.....	Brass bushing.....	Geo Dumble.....	10 88
1	85	Chemical department.....	Elbows.....	Wm Koppe.....	1 10
1	86	Chemical department.....	Chemicals.....	Garth, Nash & Robinson.....	4 32
1	87	Printing.....	Setters, blanks, etc.....	J J Pastoriza.....	14 50
1	88	Agricultural department.....	Bolts, blanket, etc.....	Wm Koppe.....	2 45
1	89	Civil Engineer.....	Blanking patterns.....	G W Dilley.....	2 75
1	90	Agricultural department.....	Sharpening six sweeps.....	A Oswald.....	1 10
1	91	Salary.....	Agent of the Board.....	T Sc tt.....	62 50
1	92	Maintenance.....	Salary.....	E W Hutchinson.....	8 34
1	93	Maintenance.....	Janitor.....	E W Hutchinson.....	35 00
1	94	Expense.....	Attending Hort Society.....	T M Scott.....	11 30
1	95	Chemical department.....	Furniture.....	Wm Koppe.....	8 67

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889 Jul.					
2	96	Maintenance .....	3,045 pounds of beef .....	W C Boyett .....	\$118 68
2	97	Postage .....	Stamps .....	W C Boyett .....	87 00
3	98	Agricultural department .....	Labor .....	J H Alsworth .....	18 40
3	99	Agricultural department .....	Labor .....	J H Alsworth .....	37 50
3	100	Maintenance .....	Mess hall .....	B Sbisla .....	317 57
3	101	Printing .....	Catalogues and envelopes .....	Clarke & Courts .....	361 90
3	102	Advertising .....	Advertising card .....	Galveston News .....	50 88
3	103	Maintenance .....	Ring .....	Carron, Sewall & Co .....	39 05
3	104	Agricultural department .....	Oats .....	Garth, Nash & Robinson .....	21 33
3	105	Agricultural department .....	Chemicals .....	Emmer & Amend .....	55 13
3	106	Expense .....	Telegram .....	Western Union Tel Co .....	1 01
3	107	Horticultural department .....	Paper .....	Judson & Co .....	4 63
3	108	Horticultural department .....	Lock .....	Wm Koppe .....	65
3	109	Veterinary department .....	Proceedings of Micros Soc .....	Wm J Lewis .....	15 70
3	110	Horticultural department .....	Labor .....	T S Brunk .....	45 00
3	111	Advertising .....	Advertising .....	Co's cara Observer .....	4 00
3	112	Advertising .....	Ad in Chieftan .....	The Chieftan .....	2 50
3	113	Advertising .....	Ad in Paris News .....	The Paris News .....	4 00
3	114	Printing advertisement .....	Ad in Austin Co Times .....	The Austin Co Times .....	5 00
14	115	Advertising .....	Advertisement .....	E W Hutchinson .....	42 50
14	116	Advertising .....	Ad for contract .....	Western Newspaper Union .....	50 00
17	117	Expense .....	R R fare to Gal and board .....	R F Smith .....	13 60
17	118	Advertising .....	Ad in Texas Farm & Ranch .....	Texas Farm and Ranch .....	27 93
17	119	Expense .....	Wells, Fargo & Co .....	Garth, Nash & Robinson .....	70
17	120	Maintenance .....	Meal .....	S A Scott .....	8 25
17	121	Expense .....	Bala ce book .....	J J Pastoriza .....	1 75
20	122	Water supply .....	Work on cistern .....	P Winter .....	30 00
20	123	Agricultural department .....	Labor .....	J H Alsworth .....	11 75
22	124	Advertising .....	Advertising .....	Texas Journal H rt .....	3 00
24	125	Agricultural department .....	Registering .....	Holstein Friesian Ass .....	6 00
26	126	Expense .....	Trip to Navosota, etc .....	T M Scott .....	2 90
Aug.					
1	127	Salary .....	Salary .....	C A Lewis .....	60 00
1	128	Salary .....	Salary .....	J H Alsworth .....	66 66
1	129	Maintenance .....	Clerk .....	E W Hutchinson .....	16 67
1	130	Salary .....	Salary .....	T M Scott .....	62 50
1	131	Maintenance .....	Janitor .....	E W Hutchinson .....	33 00
1	132	Maintenance .....	Salary .....	B Sbisla .....	50 00
1	133	Horticultural department .....	Labor .....	E W Hutchinson .....	65 00
1	134	Repairs .....	Carpentry .....	Paul Brown .....	30 00
1	135	Salary .....	Salary .....	G E Eberpacher .....	41 66
1	136	Agricultural department .....	Labor .....	J H Alsworth .....	98 00
1	137	Water supply .....	Building cistern .....	P Winter .....	200 00
1	138	Drawing department .....	Lumber .....	Garth, Nash & Robinson .....	2 70
1	139	Agricultural department .....	Ice .....	Anheuser-Pusch .....	16 32
1	140	Repairs .....	Nail .....	Garth, Nash & Robinson .....	10 05
1	141	Campus .....	Buy keye Pitman .....	L T Fuller .....	2 25
1	142	Agricultural department .....	Tubs .....	H McK Wilson & Co .....	3 82
1	143	Repairs .....	Lumber .....	Garth, Nash & Robinson .....	19 21
1	144	Agricultural department .....	Brass .....	Joseph Locke .....	17 73
1	145	Agricultural department .....	Rope .....	Cole Bros .....	13 20
1	146	Agricultural department .....	Lumber .....	Garth, Nash & Robinson .....	38 67
1	147	Agricultural department .....	Sperm oil .....	G W Norill .....	1 75
1	148	Library .....	Registers .....	Clarke & Courts .....	38 10
1	149	Advertising .....	Advertising .....	E W Hutchinson .....	16 70
1	150	Maintenance .....	Supplies .....	Carron, Sewall & Co .....	127 25
1	151	Maintenance .....	Gasoline .....	Waters-Pierce Oil Co .....	28 28
1	152	Maintenance .....	Jars .....	Z Emmich .....	9 15
3	153	Agricultural department .....	Labor .....	J H Alsworth .....	7 50
3	154	Maintenance .....	Supplies .....	B Sbisla .....	147 70
3	155	Agricultural department .....	Labor .....	J H Alsworth .....	64 00
3	156	Maintenance .....	Wood .....	J H Subers .....	26 80
10	157	Agricultural department .....	Brass .....	Texas Mill & Elevator Co .....	140 70
10	158	Agricultural department .....	Meal .....	H Schumacker .....	95 00
10	159	Agricultural department .....	Oats .....	T M Scott .....	162 04
10	160	Salary .....	Salary .....	A M Guenther .....	50 00
10	161	Agricultural department .....	Labor .....	J H Alsworth .....	5 75
10	162	Chemical department .....	Supplies .....	James Bute .....	16 85

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Aug.					
10	163	Chemical department	Supplies	Geo M Dilley & Son	\$30 70
10	164	Water supply	Labor	E W Hutchinson	7 20
12	165	Agricultural department	Freight	H & T Central Railway Co.	46 00
12	166	Book store	Freight	H & T Central Railway Co.	1 57
12	167	Civil engineering	Freight	H & T Central Railway Co.	8 94
12	168	Maintenance	Freight	H & T Central Railway Co.	74
12	169	Medical attendance	Freight	H & T Central Railway Co.	4 68
13	170	Veterinary department	Drugs	G W Norrill	5 25
13	171	Veterinary department	Supplies	Wm Koppe	1 50
13	172	Veterinary department	Sundries	Cole Bros	1 35
13	173	Veterinary department	Clevers	A Oswald	1 00
13	174	Agricultural department	Lumber	Garth, Nash & Robinson	32 91
13	175	Agricultural department	Ice	Anheuser-Busch Co.	26 05
13	176	Chemical department	Supplies	Eimer & Amend	2 85
13	177	Chemical department	Lumber	Garth, Nash & Robinson	24 97
13	178	Chemical department	Zinc	Wm Koppe	2 70
13	179	Repairs	Lined oil	G W Norrill	4 80
13	180	Repairs	Padlock and butts	Wm Koppe	1 00
13	181	Repairs	Lumber	Garth, Nash & Robinson	91 96
13	182	Expense	Box rent	Bryan postoffice	1 00
13	183	Advertising	Advertising	E W Hutchinson	13 00
13	184	Agricultural department	Express	Wells, Fargo & Co.	1 05
13	185	Expense	Telegrams	Western Union Tel Co.	2 15
14	186	Chemical department	Supplies	Emil Greiner	3 15
14	187	Chemical department	Paper	Cox & Buchanan	1 00
14	188	Chemical department	Crash	Wm Koppe	1 50
17	189	Repairs	Labor	Samuel Ellis	4 50
17	190	Agricultural department	Labor	J H Alsworth	11 25
17	191	Maintenance	Wood	J H Subers	52 60
20	192	Advertisement	Advertisement	Converse & Co.	8 00
17	193	Chemical department	Putting in floor	Peter Winter	50 00
17	194	Maintenance	Pump	U S Supply Co.	16 55
20	195	Campus	Freight	H & T Central Railway Co.	30 00
21	196	Library	Cards	Clarke & Courts	3 90
22	197	Book store	Books	Baker & Taylor Co.	229 91
22	198	Chemical department	Repairs	Norton	8 09
22	199	Chemical department	Fruit jars	Wm Koppe	4 80
22	200	Reairs	Sundries	J S Brown Co.	22 95
22	201	Dining hall	Building room	Garth, Nash & Robinson	230 00
22	202	Maintenance	Kit hen supplies	J S Brown Co.	25 50
22	203	Chemical department	Fire brick	Garth, Nash & Robinson	15 00
23	204	Water supply	Building tank	J H Subers	195 30
23	205	Water supply	Building tank	J H Subers	114 21
23	206	Fence	Fence	J H Subers	33 39
23	207	Expense	Travelling expenses	L L McInnis	27 45
24	208	Assembly Hall	Part payment	A Baumbach	5000 00
24	209	Repairs	Labor	Samuel Ellis	4 50
24	210	Agricultural department	Registering calf	Holst in-Friesian Ass.	2 00
27	211	Chemical department	Balance on floor	Peter Winter	36 84
28	212	Expense	Trip to Austin	L L McInnis	8 25
30	213	Civil engineering	Freight	H & T C Ry Co.	11 80
30	214	Campus	Freight	H & T C Ry Co.	10 00
30	215	Chemical department	Freight	H & T C Ry Co.	1 09
30	216	Repairs	Freight	H & T C Ry Co.	42 00
30	217	Maintenance	Beef	W C Boyett	113 69
30	218	Agricultural department	Labor	J H Alsworth	1 85
30	219	Repairs	Labor	Samuel Ellis	4 50
Sep.					
1	220	Horticultural department	Labor	E W Hutchinson	61 60
2	221	Salary	Salary	T M Scott	62 50
2	222	Salary	Salary	G E Everspacher	41 66
2	223	Agricultural department	Labor	J H Alsworth	86 75
2	224	Agricultural department	Labor	G W Curtis	1 15
2	225	Water supply	Building cistern	Peter Winter	72 00
2	226	Maintenance	Mess hall supplies	B Sbisaa	174 68
3	227	Maintenance	Lantern chimneys	Wm Koppe	50
3	228	Repairs	Constructing stairs	B Sbisaa	26 00
3	229	Expense	Books and ink	G W Norrill	4 35



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
8	230	Hospital furniture.....	Beds and mattresses.....	Lottman Bros.....	\$40 70
3	231	Maintenance.....	Groceries.....	Carson, Sewell & Co.....	72 57
3	232	Maintenance.....	Pillows and mattresses.....	Lottman Bros.....	104 24
3	233	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	11 11
3	234	Printing and advertising.....	Printing and advertising.....	Brazos Pilot.....	17 08
3	235	Horticultural department.....	Seed.....	Plant Seed Co.....	11 85
3	236	Horticultural department.....	Blacksmithing.....	A Oswald.....	1 65
21	237	Chemical department.....	Stove pipe.....	Wm Koppe.....	1 90
3	238	Campus.....	Lumber.....	Garth, Nash & Robinson.....	12 80
3	239	Maintenance.....	Flour.....	Texas Mill & Elevator Co.....	124 05
3	240	Advertising.....	Advertising.....	E W Hutchinson.....	69 90
3	241	Book store.....	Books.....	Theldon & Co.....	45 50
3	242	Book store.....	Books.....	G W Curtis.....	72 00
3	243	Maintenance.....	Hardware.....	Wm Koppe.....	1 65
3	244	Repairs.....	Lime.....	Garth, Nash & Robinson.....	12 00
3	245	Chemical department.....	Unions and elbows.....	Wm Koppe.....	90
3	246	Drawing department.....	Drawing boards.....	A Bering & Bro.....	7 47
3	247	Chemical department.....	Soap.....	G W Norrill.....	45
3	248	Salary.....	Salary.....	C A Lewis.....	60 00
3	249	Salary.....	Salary.....	A M Guenther.....	5000 00
3	250	Salary.....	Salary.....	J H Alsworth.....	66 66
3	251	Salary.....	Salary.....	B Sibus.....	50 00
3	252	Maintenance.....	Salary.....	E W Hutchinson.....	16 67
3	253	Drawing department.....	Shelving.....	Fink & Brants.....	20 00
5	254	Repairs.....	Cypress tub.....	Fink & Brants.....	25 00
5	255	Book store.....	Book case.....	Fink & Brants.....	6 00
6	256	Repairs.....	Plastering M H barracks.....	J S Johnson.....	38 00
7	257	Repairs.....	Second payment on repairs.....	Shields.....	45 00
7	258	Repairs.....	H nling for repairs.....	Samuel Ellis.....	5 25
6	259	Repairs.....	Labor.....	A Harbers.....	21 00
10	260	Repairs.....	Repairing roof of M B.....	Raener & Huber.....	10 50
12	261	Repairs.....	Plastering hall.....	T L Shields.....	48 95
12	262	Repairs.....	Painting.....	H T Rue.....	75 00
12	263	Agricultural department.....	Express.....	Wells, Fargo & Co.....	2 10
12	264	Horticultural department.....	Express.....	Wells, Fargo & Co.....	3 20
14	265	Repairs.....	Plastering.....	T A Rubbright.....	14 50
14	266	Campus.....	Labor.....	Samuel Ellis.....	4 50
14	267	Chemical department.....	Repairing.....	Raener & Huber.....	1 50
14	268	Repairs.....	Labor.....	J H Alsworth.....	1 90
17	269	Maintenance.....	Janitor.....	A Desezinke.....	9 00
13	270	Maintenance.....	Gasoline.....	Waters Pierce Oil Co.....	98 98
13	271	Maintenance.....	Groceries.....	Carso, Sewell & Co.....	370 47
13	272	Maintenance.....	Crockery.....	J F Dumble.....	62 00
14	273	Advertising.....	Advertisements.....	E W Hutchinson.....	67 00
14	274	Expense.....	Cuts of building.....	Texas Farm and Ranch.....	60 00
14	275	Repairs.....	Slating.....	Texas School Supply Co.....	6 00
14	276	Expense.....	Telegram.....	Western Union Tel Co.....	85
17	277	Maintenance.....	Hardware.....	J S Brown Hardware Co.....	76 34
17	278	Maintenance.....	Slop casks.....	Wm Koppe.....	2 80
17	279	Hospital equipment.....	Lamps.....	Wm Koppe.....	1 20
17	280	Maintenance.....	Soda crackers.....	Carson, Sewell & Co.....	9 50
17	281	Maintenance.....	Mattresses and pillows.....	Lottman Bros.....	79 05
18	282	Mechanical department.....	Oil.....	G W Norrill.....	2 60
18	283	Mechanical department.....	Solder.....	Wm Koppe.....	1 70
18	284	Mechanical department.....	Black walr ut.....	Fink & Brants.....	3 50
19	285	Library.....	Library cards.....	Clark & Courts.....	15 80
19	286	Book store.....	Stock.....	Albrecht & Sons.....	427 58
19	287	Book store.....	Des geometry.....	Guin & Co.....	14 58
19	288	Book store.....	Rubbers etc.....	Jas W Queen & Co.....	7 35
20	289	Campus.....	Labor.....	W J Foster.....	75 00
20	290	Campus.....	Labor.....	W E Leak.....	84 48
19	291	Repairs.....	Latches.....	Wm Koppe.....	2 25
19	292	Chemical department.....	Files.....	Wm Koppe.....	90
19	293	Repairs.....	Lumber.....	Garth, Nash & Robinson.....	14 48
19	294	Mechanical department.....	Lumber.....	Garth, Nash & Robinson.....	23 22
19	295	Campus.....	Lumber.....	Garth, Nash & Robinson.....	2 88
19	296	Horticultural department.....	Hammer and hatchet.....	Wm Koppe.....	1 15
19	297	Chemical department.....	Window sashes.....	Bering & Bro.....	8 72



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Sept.					
19	298	Bookstore .....	Glazed board .....	Crane & Co. ....	\$4 75
20	299	Hospital equipment .....	Sheeting .....	Cole Bros. ....	6 00
20	300	Repairs .....	Putty .....	G W Norrill .....	50
20	301	Horticultural department .....	Plants and seed .....	Jas W Thorburn .....	7 90
20	302	Horticultural department .....	Bush and h mes .....	Cole Bros. ....	1 00
20	303	Maintenance .....	Dippers and chimneys .....	Wm Koppe .....	7 90
20	304	Refunded .....	College fees .....	J H McClanahan .....	50 00
20	305	Book store .....	Books .....	G W Curtis .....	48 00
20	306	Farmer Institute .....	Traveling expenses .....	G W Curtis .....	17 70
20	307	Farmer Institute .....	Traveling expenses .....	T L Brunk .....	8 95
20	308	Campus .....	Labor .....	Samuel Ellis .....	4 50
23	309	Refunded .....	Board refunded .....	M A Greene .....	35 00
23	310	Repairs .....	100 galv carboneters .....	Detroit H & L Co .....	166 65
24	311	Expense .....	Expressage .....	Wells, Fargo & Co .....	1 00
26	312	Maintenance .....	Salary .....	B Sblsa .....	150 00
26	313	Library .....	Services for cataloging .....	W B Philpott .....	100 00
26	314	Meeting of board .....	Traveling expenses .....	A J Rose .....	22 60
26	315	Meeting of board .....	Expense board of directors .....	J D Fields .....	14 10
26	316	Meeting of board .....	Expense board of directors .....	D Adriance .....	13 45
25	317	Repairs .....	Paper and mouldings .....	H & T C Ry Co .....	52
25	318	Campus .....	Expressage .....	H & T C Ry Co .....	10 00
26	319	Maintenance .....	Expressage .....	H & T C Ry Co .....	3 08
28	320	Mechanical department .....	Labor .....	J H Sabers, Jr .....	24 80
28	321	Maintenance .....	Labor .....	J H Sabers, Jr .....	52 80
28	322	Repairs .....	Labor .....	H T Rice .....	13 60
28	323	Repairs .....	Painting .....	H T Rice .....	6 00
28	324	Repairs .....	Labor .....	Samuel Ellis .....	4 50
28	325	Repairs .....	Gilt border .....	McConico & Haswell .....	2 50
28	326	Repairs .....	Pipe and nipples .....	Wm Koppe .....	2 75
28	327	Repairs .....	Gilt glitter .....	James Bute .....	19 57
28	328	Maintenance .....	Ja itor .....	Peter Sawicke .....	10 00
28	329	Chemical department .....	Galvanized pipe .....	Wm Ko pe .....	1 00
28	330	Mechanical department .....	Grind stone .....	John McCroden & Co .....	18 40
28	331	Drawing department .....	Pencils, etc .....	Edward Prang Co .....	32 95
28	332	Maintenance .....	Oil .....	Waters-Pierce Oil Co .....	118 76
28	333	Maintenance .....	Table linen .....	Sanger Bros .....	24 48
Oct.	334	Repairs .....	Glass .....	James Bute .....	9 45
1	335	Salary .....	Salary .....	D Adriance .....	33 33
1	336	Salary .....	Adjunct professor .....	R F Smith .....	111 11
1	337	Salary .....	Associate professor .....	Chas Puryear .....	166 66
1	338	Salary .....	Prof of horticulture .....	T S Brunk .....	116 66
1	339	Salary .....	Prof of chemistry .....	H H Harrington .....	200 00
1	340	Salary .....	Prof of English .....	W L Brughurst .....	250 00
1	341	Salary .....	Associate of drawing .....	FE Gliesecke .....	111 11
1	342	Salary .....	Prof of veterinary science .....	M Francis .....	83 33
1	343	Salary .....	Professor languages .....	R Wipprich .....	222 22
1	344	Salary .....	Professor agriculture .....	George W Curtis .....	200 00
1	345	Salary .....	Prof. mechanical engineering .....	R H Whitlock .....	250 00
1	346	Salary .....	Prof of mathematics .....	L L McInnis .....	294 44
1	347	Salary .....	Assistant professor .....	J M Carson .....	33 33
1	348	Salary .....	Foreman of farm .....	J H Alsworth .....	66 66
1	349	Half salary .....	Agent board of directors .....	T M Scott .....	62 50
1	350	Salary .....	Asst Prof of English .....	W B Philpott .....	75 00
1	351	Salary .....	Instructor blacksmith .....	A M Guenther .....	50 00
1	352	Salary .....	Asst Prof of horticulture .....	H S Jennings .....	50 00
1	353	Salary .....	Foreman of garden .....	H Ness .....	41 66
1	354	Salary .....	Foreman of shop .....	C A Lewis .....	60 00
1	355	Medical attendance .....	Surgeon .....	J D Read .....	100 00
1	356	Salary .....	Foreman of orchard .....	T E Barnett .....	30 00
1	357	Maintenance .....	Drummer .....	J R Fisk .....	20 00
1	358	Maintenance .....	Janitors .....	E W Hutchinson .....	107 00
1	359	Maintenance .....	Clerk .....	E W Hutchinson .....	16 67
1	360	Maintenance .....	Beef .....	W C Boyett .....	290 53
2	361	Expense .....	Envelopes .....	W C Boyett .....	52 60
2	362	Maintenance .....	Labor .....	A Harbers .....	9 20
2	363	Chemical department .....	Labor .....	A Harbers .....	10 00
2	364	Maintenance .....	Laundry .....	Excelsior Steam Laundry .....	109 50

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Oct.					
3	365	Drawing department.....	Drawing models.....	F E Giescke.....	\$7 75
3	366	Agricultural department.....	Labor.....	J H Alsworth.....	73 80
3	367	Agricultural department.....	Corn.....	Chance Bros.....	32 67
3	368	Maintenance.....	Expressage.....	Wells, Fargo & Co.....	24 70
3	369	Book store.....	Books.....	Baker & Taylor.....	153 87
3	370	Engineering department.....	Historical charts.....	T MacCoun.....	10 00
3	371	Hospital supplies.....	Rubber.....	Cole Bros.....	7 50
3	372	Hospital supplies.....	Hardware.....	Wm Koppe.....	21 25
3	373	Advertising college.....	Advertising college.....	The Cuero Star.....	4 00
3	374	Medical attendance.....	Medicine and chemics.....	I L Lyons.....	90 65
3	375	Book store.....	Peck's Ganot.....	A L Barnes & Co.....	43 44
3	376	Book store.....	Storer's Agricultural.....	Chas Scribner's Sons.....	13 36
3	377	Expense.....	Telegram.....	Western Union Tel Co.....	5 30
3	378	Maintenance.....	Crockery.....	Wm Koppe.....	13 51
3	379	Book store.....	De Vere's Spanish grammar.....	Daniel Appleton.....	9 65
3	380	Maintenance.....	Med.....	Texas Mill and Elevator Co.....	104 94
3	381	Maintenance.....	Chimneys.....	S M Rumsey Mfg Co.....	11 55
3	382	Maintenance.....	Water buckets.....	J S Brown Hardware Co.....	8 50
3	383	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	512 28
3	384	Chemical department.....	Hardware.....	Geo Dumble.....	1 39
3	385	Drawing department.....	Books.....	S Castrevelche.....	11 77
3	386	Chemical department.....	Hardware.....	Eimer & Amend.....	8 15
3	387	Repairs.....	Shingles.....	Garth, Nash & Robinson.....	56 25
5	388	Chemical department.....	Expressage.....	H H Harrington.....	1 50
5	389	Campus.....	Labor.....	Samuel Ellis.....	4 50
5	390	Agricultural department.....	Corn.....	Dominique.....	7 25
7	391	Expense.....	Express.....	Wells, Fargo & Co.....	1 35
7	392	Drawing department.....	Express.....	Wells, Fargo & Co.....	1 25
7	393	Bookstore.....	Express.....	Wells, Fargo & Co.....	14 50
7	394	Maintenance.....	Express.....	Wells, Fargo & Co.....	1 60
7	395	Maintenance.....	Mess hall expenses.....	B Sbis.....	519 04
7	396	Agricultural department.....	Books and hinges.....	Wm Koppe.....	4 15
7	397	Hospital equipments.....	Syringe.....	W Norrill.....	2 25
7	398	Expense.....	Trip to Austin.....	L L McInnis.....	7 60
7	399	Dallas fair.....	Glass.....	G W Norrill.....	3 90
7	400	Advertising college.....	Advertisement.....	E W Hutchison.....	12 30
7	401	Repairs.....	Socks.....	Wm Koppe.....	4 25
7	402	Chemical department.....	Brass and band iron.....	Wm Koppe.....	1 65
7	403	Chemical department.....	Wooden boxes.....	G W Norrill.....	35
7	404	Agricultural department.....	Salt.....	J W Elish.....	1 30
7	405	Medical supplies.....	Wine.....	G W Norrill.....	1 00
7	406	Dallas fair.....	Mouldings.....	Louis White.....	16 20
7	407	Campus.....	Collar.....	Hanway & Son.....	6 65
7	408	Maintenance.....	Dippers.....	Wm Koppe.....	1 00
7	409	Maintenance.....	Lumber.....	Garth, Nash & Robinson.....	4 98
7	410	Maintenance.....	Matresses.....	Lottman Bros.....	48 40
7	411	English department.....	Globe case, standard maps.....	Texas School & Supply Co.....	28 95
7	412	Book store.....	Deer geom.....	Guin & Co.....	9 00
7	413	Bookstore.....	Books.....	J J Pastoriza.....	9 75
7	414	Book store.....	Books.....	B Westerman & Co.....	25 87
1	415	Book store.....	Geom and calculus.....	A S Barnes & Co.....	5 11
7	416	Veterinary department.....	Sample paper.....	Clark & Curtis.....	6 25
7	417	Agricultural department.....	Extras.....	L T Fuller.....	11 00
7	418	Maintenance.....	Hardware.....	L M Rumsey.....	12 70
7	419	Agricultural department.....	Oil.....	G W Norrill.....	7 25
8	420	Expense.....	Specimens.....	A H Curti.....	18 30
8	421	Refunded.....	Not prepared to enter.....	S F Harris.....	55 00
8	422	Refunded.....	Refunded.....	H G Caldwell.....	55 00
9	423	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	43 06
9	424	Chemical department.....	Burners and cocks.....	May & Wainwright.....	4 10
9	425	Expense.....	Books.....	G W Norrill.....	4 75
1	426	Library.....	Chaplain.....	C P Fottin.....	100 00
10	427	Mechanical department.....	Varnish and oil.....	Geo W Norrill.....	1 50
10	428	Expense.....	Exchange.....	1st National Bank, Bryan.....	20 87
10	429	Repairs.....	Tile.....	Mitchell Clay Mfg Co.....	42 00
10	430	Agricultural department.....	Ice.....	Anheuser-Busch Co.....	40 95
10	431	Maintenance.....	Laundry.....	Excelsior Steam Laundry.....	59 10
10	432	Medical attendance.....	Chemicals.....	J T Lyons & Co.....	39 53

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Oct.					
10	433	Horticultural department.....	Labor.....	H S Jennings.....	\$15 00
11	434	Expense.....	Books, soap, etc.....	Geo W Norrill.....	3 75
12	435	Agricultural department.....	Labor.....	J H Alswoorth.....	11 00
12	436	Campus.....	Labor.....	Samuel Ellis.....	4 50
12	437	Dallas fair.....	Express.....	Wells-Fargo Expr ss Co.....	70
12	438	Expense.....	Express.....	Wells-Fargo Express Co.....	1 15
12	439	Maintenance.....	Express.....	Wells-Fargo Expr ss Co.....	13 25
12	440	Agricultural department.....	Express.....	Wells-Fargo Expr ss Co.....	2 60
12	441	Maintenance.....	Express.....	H & T C Ry Co.....	14 16
12	442	Medical attendance.....	Freight.....	H & T C Ry Co.....	2 76
12	443	Chemical department.....	Freight.....	H & T C Ry Co.....	1 21
12	444	Mechanical department.....	Freight.....	H & T C Ry Co.....	11 64
14	445	Dallas fair.....	Traveling expense.....	E W Henderson.....	30 00
15	446	Maintenance.....	Express.....	Wells, Fargo & Co.....	10 35
15	447	McGregor fair ex.....	Express.....	Wells, Fargo & Co.....	75
15	448	Expense.....	Keys and rim.....	Yale & Town Mfg Co.....	12 78
15	449	Horticultural department.....	Plants.....	M Crawford & Son.....	1 00
15	450	Horticultural department.....	Plants.....	H E VanSiman.....	3 00
15	451	Horticultural department.....	Plants.....	W V Wright.....	5 50
15	452	Mechanical department.....	Seed.....	George M Dilley & Sons.....	16 77
15	453	Mechanical department.....	Lumber.....	Garth, Nash & Robinson.....	10 54
15	454	Chemical department.....	Hardware.....	Wm Koppe.....	75
16	455	Horticultural department.....	Hardware.....	Wm Koppe.....	3 20
16	456	Maintenance.....	Furniture.....	Scarritt Furniture Co.....	78 88
17	457	Mechanical department.....	Iron.....	George M Dilley & Sons.....	10 57
17	458	Mechanical department.....	Hand lattice.....	F E Read.....	7 70
18	459	Chemical department.....	Steel rod.....	George M Dilley & Sons.....	3 00
18	460	Book store.....	Drawing material.....	H Albright & Sons.....	122 96
18	461	Book store.....	Botany, chemistry and phy.....	Baker & Taylor Co.....	16 73
18	462	Book store.....	Books.....	D C Heath & Co.....	25 92
18	463	Chemical department.....	Chemicals.....	Emmer & Amend.....	172 71
18	464	Advertising.....	Advertising college.....	Democrat Publishing Co.....	30 75
19	465	Campus.....	Labor.....	Samuel Ellis.....	4 50
19	466	Assembly Hall.....	Eighth pay on contract.....	A Baumbach.....	1000 00
19	467	Medical attendance.....	Hospital steward.....	Philip Prinzie.....	20 00
21	468	Maintenance.....	Wood.....	J H Subers, Jr.....	52 80
21	469	Veterinary department.....	Horse.....	W B Royall.....	15 00
24	470	Refunded.....	Resigned by request.....	S E Dwy.....	20 00
28	471	Civil Engineering.....	Express.....	H & T C Ry.....	6 91
29	472	Refunded.....	Resigned—sickness.....	H K Hancock.....	20 00
29	473	Maintenance.....	Bags, meal, etc.....	Texas Mill & Elevator Co.....	158 56
29	474	Bath house repairs.....	Bath tubs.....	A Harbers.....	73 50
29	475	Maintenance.....	Labor.....	A Harbers.....	2 00
29	476	Assembly Hall.....	Labor.....	A Harbers.....	3 00
19	477	Assembly Hall.....	Part payment on A H.....	A Baumbach.....	2000 00
Nov.					
1	478	Campus.....	Sand.....	George Simon.....	1 00
1	479	Maintenance.....	Wood.....	J H Subers.....	76 80
1	480	Maintenance.....	Meal.....	Texas Mill & Elevator Co.....	25 70
1	481	Civil engineer.....	Oiling one tool case.....	H T Rice.....	5 00
1	482	Assembly Hall.....	Material.....	A Baumbach.....	3348 82
1	483	Repairs.....	Repa ring.....	A Baumbach.....	50 00
2	484	Maintenance.....	Drummer.....	J A Fisk.....	20 00
1	485	Salaries.....	Prof of Agriculture.....	G W Curtis.....	200 00
1	486	Salaries.....	Prof of English.....	W L Bringham.....	250 00
1	487	Salaries.....	Prof of Mathematics.....	L L McInnis.....	294 44
1	488	Salaries.....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
1	489	Salaries.....	Prof of Veterinary Science.....	M Francis.....	83 33
1	490	Salaries.....	Instructor in Drawing.....	F E Giesicke.....	111 11
1	491	Salaries.....	Prof of Chem and Miu.....	H H Harrington.....	200 00
1	492	Salaries.....	Prof of Languages.....	R Whipprecut.....	222 22
1	493	Salaries.....	Prof of Horticulture.....	T L Brum.....	116 66
1	494	Salaries.....	Prof of Civil Eng and Phys.....	Charles Puryear.....	166 66
1	495	Salaries.....	Asst Prof Eng and History.....	W B Philpot.....	15 00
2	496	Salaries.....	Assistant professor chemistry.....	D Adriance.....	33 33
1	497	Salaries.....	Adj Prof of Mathematics.....	R F Smith.....	111 11
1	498	Salaries.....	Asst mechanical engineering.....	P Braun.....	50 00
1	499	Salaries.....	Foreman of shop.....	A M Guenther.....	50 00



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Nov.					
1	500	Salaries .....	Asst Prof of horticulture....	H S Jennings.....	\$50 00
1	501	Salaries .....	Instructor of mathematics....	J D Fearhake.....	50 00
1	502	Salaries .....	As-t Prof of agriculture.....	J M Cars n.....	33 33
1	503	Salaries .....	Captain and librarian.....	C P Fountain.....	100 00
1	504	Salaries .....	Foreman of garden.....	H Ness.....	41 66
1	505	Salaries .....	Foreman of orchard.....	C E Barnett.....	30 00
1	506	Salaries .....	Foreman of shop.....	C A Lewis.....	60 00
1	507	Salaries .....	Foreman of farm.....	J H Alsworth.....	66 66
1	508	Medical attendance.....	Surgeon.....	J D Read.....	100 00
2	509	Book store.....	Express.....	Wells-Fargo Express Co....	4 55
2	510	Horticultural department....	Express.....	Wells-Fargo Express Co....	4 25
2	511	Maintenance .....	Express.....	Wells-Fargo Express Co....	19 95
1	512	Maintenance .....	Beef.....	Wm Boy tt.....	390 36
1	513	English department.....	Labor.....	Frank McInnis.....	50
1	514	Agricultural department....	Labor.....	Frank McInnis.....	9 00
1	515	Drawing department.....	Labor.....	Frank McInnis.....	50
1	516	Repairs.....	Labor.....	Frank McInnis.....	28 50
1	517	Dallas fair.....	Hardware.....	R H Whitlock.....	91 45
1	518	Dallas fair.....	Traveling expenses.....	R H Whitlock.....	13 55
1	519	Dallas fair.....	Freight.....	G W Curtis.....	229 25
1	520	Dallas fair.....	Trip to Dallas.....	L L McInnis.....	29 45
1	521	Dallas fair.....	Educational exhibit.....	E W Hutchinson.....	55 10
1	522	Book store.....	Stationery.....	Baker, Taylor & Co.....	41 71
1	523	Maintenance .....	Freight.....	H & T C Ry Co.....	2 41
1	524	Maintenance .....	Freight.....	H & T C Ry Co.....	54 41
1	525	Civil engineering.....	Labor.....	Frank McInnis.....	7 50
1	526	Agricultural department....	Labor.....	J H Alsworth.....	42 65
1	527	Dallas fair.....	Traveling expense.....	G W Curtis.....	30 55
2	528	Assembly Hall.....	Chandelier and lamp.....	W W Wal er.....	79 20
1	529	Maintenance .....	Supplies.....	B Sbis.....	964 76
2	530	Maintenance .....	Janitors.....	E W Hutchinson.....	98 00
2	531	Horticultural department....	Labor.....	H S Jennings.....	15 00
2	532	Maintenance .....	Steward.....	B Sbis.....	150 00
2	533	Maintenance .....	Laundry.....	Excelsior Laundry.....	175 50
2	534	Maintenance .....	Labor.....	Samuel Ellis.....	4 50
2	535	Half salary.....	Agent of board.....	F M Scott.....	62 50
4	536	Maintenance .....	Services as clerk.....	E W Hutchinson.....	16 67
4	537	Civil engineering.....	Instruments.....	Jas W Queen & Co.....	149 50
4	538	Civil engineering.....	Lumber.....	Garth, Nash & Robinson... 3 21	
4	539	Mechanical department....	Lumber.....	Garth, Nash & Robinson... 4 48	
4	540	Chemical department.....	Books.....	G W Norrill.....	2 40
4	541	Horticultural department....	Paper.....	Hall, Howell & Austen.... 85	
4	542	Veterinary department.....	Glycerine.....	G W Norrill.....	80
4	543	Maintenance .....	Hardware.....	Wm Koppe.....	15 40
4	544	Expense .....	Stationery.....	G W Norrill.....	2 30
4	545	Maintenance .....	Lumber.....	Garth, Nash & Robinson... 4 61	
4	546	Maintenance .....	Goblets.....	J T Dumble.....	8 25
4	547	Horticultural department....	Chemicals.....	Wm Clowe.....	13 85
4	548	Horticultural department....	Seed.....	Plant Seed Co.....	8 25
4	549	Maintenance .....	Coal.....	Palo Pinto Coal Co.....	49 45
4	550	Maintenance .....	Groceries.....	Carson, Sewall & Co.....	675 40
4	551	Maintenance .....	Oil.....	Waters-Pierce Oil Co.....	138 81
4	552	Expense .....	Hardware.....	Miller Lock Co.....	7 80
4	553	Drawing department.....	Lumber.....	Garth, Nash & Robinson... 1 11	
4	554	Chemical department.....	Merchandise.....	J W Queen & Co.....	3 40
4	555	Chemical department.....	Oil.....	D Adrance.....	95
4	556	Hospital equipment.....	Case.....	I S Lyons & Co.....	15 19
4	557	Maintenance .....	Chalk crayon.....	McConice & Haswell.....	1 50
5	558	Students' labor.....	Labor.....	E E Boxkin.....	3 22
5	559	Maintenance .....	Fish and oysters.....	J Biagui.....	48 30
5	561				
8	562	Maintenance .....	Labor.....	Samuel Ellis.....	4 50
9	563	Assembly Hall.....	Labor.....	Samuel Elli.....	4 50
16	564	Assembly Hall.....	Labor.....	Samuel Ellis.....	4 50
20	566	A and M convention.....	Traveling expenses.....	L L McInnis.....	106 40
22	567	Expense .....	Box rent.....	J Q Taylor.....	1 00
22	568	Maintenance .....	Laundry.....	Excelsior Laundry.....	182 40
22	569	Maintenance .....	Expressage.....	Wells-Fargo Express Co.... 25 81	



## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Nov.					
23	570	Mechanical department.....	Wood .....	J H Subers, Jr.....	\$22 40
23	571	Medical attendance.....	Wood .....	J H Subers, Jr.....	17 60
23	572	Campus .....	Labor .....	Samuel Ellis .....	4 50
30	573	Campus .....	Labor .....	Samuel Ellis .....	4 50
Dec.					
2	574	Agricultural department.....	Labor .....	J H Alsworth.....	15 00
2	575	Salaries .....	Foreman of farm.....	J H Alsworth.....	66 66
2	576	Expense .....	Express .....	Wells, Fargo & Co.....	1 85
2	577	Maintenance .....	Express .....	Wells, Fargo & Co.....	17 20
2	578	Veterinary science .....	Express .....	Wells Fargo & Co.....	1 70
3	579	Maintenance .....	Beef .....	W C Boyett.....	468 65
3	580	Expense .....	Stamps .....	W C Boyett.....	4 60
3	581	Agricultural department.....	Rope .....	W C Boyett.....	2 05
3	582	Expense .....	Paper .....	W C Boyett.....	1 00
3	583	Repairs.....	Brick flue .....	J S Johnson.....	2 50
3	584	Medical attendance .....	Medicine .....	J S Lyons .....	13 50
3	585	Chemical department.....	Chemicals .....	June & Gentry .....	1 50
3	586	Drawing department.....	Lumber .....	Garth, Nash & Robinson...	1 71
3	587	Drawing department .....	Sc ew s .....	Wm Koppe .....	50
3	588	Chemical department.....	Glass .....	G Norrill.....	1 60
3	589	Mechanical department.....	Drill .....	Cleveland Drill Co.....	6 92
3	590	Veterinary department.....	Drill .....	Cleveland Drill Co.....	1 92
3	591	Drawing department.....	Lumber .....	J M Wilcox & Sons .....	2 88
3	592	Mechanical department.....	Lumber .....	Garth, Nash & Robinson...	7 80
3	593	Maintenance .....	Flour .....	Texas Mill & Elevator Co...	164 84
3	594	Maintenance .....	Dog irons .....	Wm Koppe .....	1 35
3	595	Expense .....	Luk .....	J J Pastoriza.....	5 50
3	596	Maintenance .....	Crockery .....	J F Dumble .....	28 98
3	597	Hospital equipment.....	Saw and tub.....	Cole Bros .....	5 42
3	598	Chemical department.....	Hardware .....	Wm Koppe .....	10 20
3	599	Expense .....	Domestic .....	Cole Bros .....	1 00
3	600	Expense .....	Printing .....	Clark & Courts.....	6 19
3	601	Museum .....	Specimens .....	Chas H Pennypacker .....	9 50
3	602	Hospital equipments .....	Duster .....	G W Norrill.....	75
3	603	Expense .....	Stationery .....	Thalman Mfg Co.....	11 76
3	604	Mechanical department.....	Slips .....	ox & Buchanan .....	2 50
3	605	Expense .....	Circulars .....	Cox & Buchanan .....	28 25
3	606	Maintenance .....	Meal .....	S A Scott .....	19 90
3	607	Maintenance .....	Oil, gas and iron.....	Walters Pier e Oil Co.....	124 23
3	608	Maintenance .....	Groceries .....	Carson, S wall & Co.....	530 71
3	609	Fence .....	Hardware .....	Wm Koppe .....	3 75
3	610	Hospital equipments .....	Clock .....	McKinzer & Co.....	2 00
3	611	Assembly Hall .....	Hardware .....	Wm Koppe .....	78 09
3	612	Expense .....	Slating .....	Texas Scho l Supply Co...	6 45
3	613	Maintenance .....	Janitor.....	E W Hutchinson.....	96 50
6	614	Student labor.....	Labor .....	F E Giessecke .....	50
5	615	Campus .....	Lumber .....	Garth, Nash & Robinson...	149 66
5	616	Fence .....	Hardware .....	Saborn & Warne .....	51 95
5	617	Agricultural department.....	Glass and oil.....	G W Norrill.....	4 35
5	618	Agricultural department.....	Oats and bran .....	Jesse H Locke .....	10 91
5	619	Agricultural department.....	Hardware .....	Wm Koppe .....	4 10
5	620	Veterinary department.....	Lumber .....	Garth, Nash & Robinson...	75
5	621	Book store .....	Pruning shears.....	Mcrone Hardware Co.....	3 50
5	622	Horticultural department.....	Lumber .....	Garth, Nash & Robinson...	3 30
5	623	Horticultural department.....	Hardware .....	Cole Bros .....	2 45
5	624	Horticultural department.....	Sprinkler .....	Wm Koppe .....	85
5	625	Repairs.....	Putty .....	G W Norrill.....	1 85
5	626	Repairs.....	Lumber .....	Garth, Nash & Robinson...	9 10
5	627	Expense .....	Crayon .....	McConice & Hawell.....	10 00
5	628	Library .....	Subscription .....	Journal of Med & Sur...	4 00
5	629	Book store .....	Algebra .....	Atterberg, Bragg & Co...	27 00
5	630	Medical attendance.....	Surgeon .....	J D Read .....	100 00
5	631	Maintenance .....	Steward .....	Babbs .....	150 00
5	632	Salaries .....	Assistant professor .....	J M Carson .....	33 23
5	633	Salaries .....	Asst Prof of horticulture.....	H Jennings .....	50 00
5	634	Salaries .....	Instruction in blacksmithing.....	A M Guenther.....	50 00
5	635	Salaries .....	Asst Prof Mechanical Eng.....	P Braun.....	50 00
5	636	Salaries .....	Asst Prof Chem and Phys.....	D Adair.....	33 33

## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Dec.					
5	637	Salaries .....	Assistant Prof English. ....	W B Philpott.....	\$75 00
5	638	Maintenance .....	Bookkeeper .....	E W Hutchinson.....	16 67
5	639	Salaries .....	Foreman of carpenter shop.....	A Lewis .....	60 00
5	640	Salaries .....	Assl Prof mathematics.....	J D Fearhake.....	50 00
5	641	Salaries .....	Foreman of garden.....	H Ness .....	41 66
5	642	Salaries .....	Foreman of orchard.....	C E Barnett.....	30 00
5	643	Salaries .....	Chaplain.....	C P Fountain.....	100 00
5	644	Salaries .....	Agent of the Board.....	T M Scott.....	62 50
30	645	Salaries .....	Prof of Languages.....	R W Wippricht.....	222 22
30	646	Salaries .....	Ass. Prof drawing.....	F E Giesecke.....	111 11
30	647	Salaries .....	Prof of Mechanical Eng.....	R H Whitlock.....	200 00
30	648	Salaries .....	Professor chemistry.....	H H Harrington.....	20 00
30	649	Salaries .....	Prof of mathematics.....	L L McInnis.....	294 44
30	650	Salaries .....	Prof English and history.....	W L Bringham.....	250 00
30	651	Salaries .....	Prof of Agriculture.....	G M Curtis.....	200 00
30	652	Salaries .....	Associate Prof Vet Science.....	M Francis.....	83 33
5	653	Salaries .....	Associate Prof Civil Eng.....	Chas Pur ear.....	166 66
5	654	Salaries .....	Adjunct Prof Mathematics.....	R F Smith.....	111 11
5	655	Maintenance .....	Mess hall.....	B Sbia.....	821 13
6	656	Maintenance .....	Wood.....	J H Subers, Jr.....	68 80
6	657	Campus.....	Labor.....	Samuel Ellis.....	4 60
9	658	Agricultural department.....	Double trees .....	A Oswald.....	6 00
9	659	Campus.....	Hardware .....	Wm Koppe.....	7 00
9	660	Repairs.....	Hardware .....	Wm Koppe.....	3 75
9	661	Maintenance .....	Washing.....	Excelsior Laundry.....	118 80
11	662	Salary .....	Prof of Hort and Botany.....	T L B ank.....	116 66
12	663	Agricultural department.....	Traveling expense.....	J H Alsworth.....	42 50
12	664	Medical attendance.....	Steward.....	Philip Prinze.....	27 33
12	665	Library.....	Book.....	W S Scott.....	5 00
12	666	Horticultural department.....	Labor.....	H S Jennings.....	15 00
12	667	Maintenance .....	Drummer .....	J R Fiske.....	20 00
12	668	Reading room.....	Subscription.....	Munn & Co.....	5 60
12	669	Book store.....	Books.....	Baker & Taylor Co.....	82 98
12	670	Library.....	Books.....	Baker & Taylor Co.....	196 47
14	671	Fence.....	Payment on contract.....	J H Subers, Jr.....	75 00
14	672	Maintenance .....	Wood.....	J H Subers, Jr.....	6 68
16	673	Campus.....	Teamster.....	Samuel Ellis.....	4 50
16	674	Veterinary department.....	Dry Goods .....	John T Wise.....	80
16	675	Expense.....	Cape.....	Mistrot Bros.....	75
16	676	Maintenance .....	Laundry.....	Excelsior Laundry.....	60 00
16	677	Chemical department.....	Coal.....	Houston Coal Co.....	41 00
16	678	Stock.....	Expense.....	George W Curtis.....	37 25
16	679	Advertising.....	Advertising.....	Christian Messenger.....	6 60
16	680	Veterinary department.....	Chemicals.....	G W Norill.....	3 10
16	681	Veterinary department.....	Hardware .....	Wm Koppe.....	4 75
16	682	Expense.....	Elony sticks.....	M C Lilley & Co.....	1 10
16	683	Maintenance .....	Iron.....	Waters-Pierce Oil Co.....	10 10
16	684	Veterinary department.....	Labor.....	F McInnis.....	1 00
16	685	Repairs.....	Labor.....	F McInnis.....	3 00
16	686	Campus.....	Labor.....	F McInnis.....	11 50
16	687	Maintenance .....	Labor.....	F McInnis.....	17 00
16	688	Drawing department.....	Labor.....	F McInnis.....	19 50
16	689	Chemical department.....	Labor.....	F McInnis.....	15 00
16	690	Agricultural department.....	Hardware .....	Wm Koppe.....	2 84
16	691	Agricultural department.....	Lumber.....	Guth, Nash & Robinson.....	13 18
16	692	Maintenance .....	Express.....	Wells, Fargo & Co.....	90
16	693	Maintenance .....	Express.....	Wells, Fargo & Co.....	25 40
16	694	Horticultural department.....	Express.....	Wells, Fargo & Co.....	13 60
16	695	Expense.....	Express.....	Wells, Fargo & Co.....	3 90
16	696	Agricultural department.....	Labor.....	J H Alsworth.....	3 00
16	697	Campus.....	Labor.....	Samuel Ellis.....	4 50
16	698	Agricultural department.....	Labor.....	J H Subers, Jr.....	2 50
16	699	Campus.....	Labor.....	J H Subers, Jr.....	3 75
18	700	Maintenance .....	Wood.....	J H Subers, Jr.....	38 40
16	701	Expense.....	Trip to Austin.....	L L McInnis.....	6 00
16	702	Maintenance .....	Laundry.....	Excelsior Laundry.....	109 02
16	703	Expense.....	Burying cadet.....	H H Jones.....	6 50
16	704	Expense.....	Coffin for cadet.....	J F Parks.....	33 10

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Dec.					
16	705	Expense.....	Lot in city cemetery.....	City of Bryan.....	\$5 00
16	706	Expense.....	Exchange.....	First National Bank, Bryan	41 87
16	707	Agricultural department.....	Labor.....	Frank Merrill.....	13 33
16	708	Chemical department.....	Chemicals.....	Eimer & Amend.....	79 33
16	709	Mechanical department.....	Lumber.....	Garth, Nash & Robinson....	10 60
16	710	Library.....	Books.....	C Puryear.....	7 54
16	711	Library.....	Books.....	H Mitchell.....	71 50
16	712	Drawing department.....	Tape.....	J W Queen & Co.....	66 26
16	713	Engineering department.....	Tape.....	J W Queen & Co.....	7 32
16	714	Campus.....	Shrubbery.....	W W Still.....	294 44
16	715	Salary.....	Chairman.....	L L McInnis.....	250 00
16	716	Salary.....	Prof of English.....	W L Bringham.....	250 00
Jan.					
1	717	Salary.....	Teacher.....	R H Whitlock.....	200 00
1	718	Salary.....	Teacher.....	G W Curtis.....	200 00
1	719	Salary.....	Teacher.....	H H Harrington.....	222 22
1	720	Salary.....	Teacher.....	R Wipprecht.....	33 33
1	721	Salary.....	Teacher.....	M Francis.....	111 11
1	722	Salary.....	Teacher.....	F E Giesecke.....	62 50
1	723	Salary.....	Business agent.....	T M Scott.....	166 66
1	724	Salary.....	Teacher.....	C Puryear.....	116 66
1	725	Salary.....	Teacher.....	T L Bunk.....	111 11
1	726	Salary.....	Teacher.....	R F Smith.....	75 00
1	727	Salary.....	Teacher.....	W B Philpott.....	33 33
1	728	Salary.....	Teacher.....	D Adriance.....	33 33
1	729	Salary.....	Teacher.....	J M Carson.....	100 00
1	730	Salary.....	Chaplain.....	C P Fountain.....	50 00
1	731	Salary.....	Teacher.....	Paul Brown.....	50 00
1	732	Salary.....	Instructor.....	A M Guenther.....	50 00
1	733	Salary.....	Instructor.....	H S Jennings.....	50 00
1	734	Salary.....	Teacher.....	J D Fearhake.....	41 66
1	735	Salary.....	Foreman greenhouse.....	H Ness.....	13 35
1	736	Farmers' Institute.....	Traveling expenses.....	G W Curtis.....	8 05
1	737	Student labor.....	Labor.....	H H Harrington.....	13 35
1	738	Farmers' Institute.....	Expense.....	H H Harrington.....	.....
Dec.					
31	739	Expense.....	Trip to Waco.....	W L Bringham.....	9 60
31	740	Student labor.....	Labor.....	J M Carson.....	4 00
31	741	Student labor.....	Labor.....	J M Carson.....	1 70
31	742	Maintenance.....	Freight.....	H & T Central Railway Co.	1 80
31	743	Book store.....	Freight.....	H & T Central Railway Co.	2 74
31	744	Museum.....	Freight.....	H & T Central Railway Co.	3 65
31	745	Drawing department.....	Freight.....	H & T Central Railway Co.	65
31	746	Horticultural department.....	Rope.....	J W English.....	25
31	747	Horticultural department.....	Lap ring.....	Cole Bros.....	25
31	748	Horticultural department.....	Plow points.....	A Oswald.....	1 00
31	749	Horticultural department.....	Seed.....	J W Thornburn & Co.....	3 38
31	750	Horticultural department.....	Harness.....	Hanway & Son.....	2 50
31	751	Horticultural department.....	Manure.....	J F Parks.....	4 40
31	752	Horticultural department.....	Printing.....	Cox & Buchanan.....	1 50
Jan.					
1	753	Museum.....	Show case.....	Meyer Bros.....	7 25
Dec.					
3	754	Museum.....	Show case.....	Meyer Bros.....	54 00
31	755	Libary.....	Cyclo sheep special.....	A J Johnson & Co.....	39 80
31	756	Chemical department.....	Minerals.....	Geo L English & Co.....	11 00
31	757	Farmers' Institute.....	Circular.....	Cox & Buchanan.....	6 00
31	758	Chemical department.....	Charcoal.....	Wm Koppe.....	50
31	759	Medical attendance.....	Visit to student.....	Jas R Johnson.....	5 00
31	760	Book store.....	Books.....	Guin & Co.....	72 20
31	761	Book store.....	Books.....	Baker, Taylor & Co.....	26 03
31	762	Agricultural department.....	Sharpening plow points.....	A Oswald.....	1 05
Jan.					
1	763	Salary.....	Foreman.....	J H Alsworth.....	66 66
1	764	Medical attendance.....	Surgeon.....	J D Read.....	100 00
1	765	Salary.....	Foreman.....	C E Barnett.....	30 00
1	766	Maintenance.....	Assistant secretary.....	E W Hutchinson.....	16 67
1	767	Salary.....	Foreman of shop.....	C A Lewis.....	60 00



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1889					
Dec.					
31	768	Students' labor.....	Labor.....	S H Jennings.....	\$6 20
31	769	Horticultural department.....	Labor.....	S H Jennings.....	15 00
31	770	Maintenance.....	Gasoline.....	Waters-Pierce Oil Co.....	138 87
31	771	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	450 50
31	772	Maintenance.....	Stewart.....	B Sbsa.....	150 00
1890					
Jan.					
1	773	Maintenance.....	Mess hall supplies.....	B Sbsa.....	611 79
1	774	Stud nts' labor.....	Labor.....	Paul Brown.....	6 80
1	775	Maintenance.....	Drummer.....	J B Fiske.....	20 00
1	776	Maintenance.....	Beef.....	W C Boyett.....	287 30
1	777	Expense.....	Stamps and mucilage.....	W C Boyett.....	11 00
2	778	Chemical department.....	Express.....	Wells, Fargo & Co.....	75
2	779	Expense.....	Express.....	Wells, Fargo & Co.....	40
2	780	Maintenance.....	Express.....	Wells, Fargo & Co.....	9 40
2	781	Horticultural department.....	Express.....	Wells, Fargo & Co.....	1 20
2	782	Expense.....	Express.....	Wells, Fargo & Co.....	40
2	783	Agricultural department.....	Labor.....	J H Alsworth.....	20 25
2	784	Agricultural department.....	Vat holder.....	DeLaval Separdor.....	6 50
2	785	Horticultural department.....	Hardware.....	Judson & Co.....	2 88
Dec.					
31	786	Campus.....	Shade trees.....	John S Kern.....	17 80
Jan.					
2	787	Maintenance.....	Janitors.....	E W Hutchinson.....	94 25
2	788	Agricultural department.....	Tools.....	Wm Koppe.....	50
2	789	Horticultural department.....	Labor.....	H Yeoger.....	1 75
2	790	Expense.....	Amount on new stables.....	D Adriance.....	14 50
3	791	Expense.....	Stockman.....	F Morrill.....	50 00
3	792	Expense.....	Attending to telephone.....	W W Harris.....	25 00
3	793	Expense.....	Letter heads.....	J J Pastoriza.....	15 85
3	794	Chemical department.....	Chemical instruments.....	Eimer & Amend.....	29 25
3	795	Drawing department.....	Hand balance.....	Jas W Queen & Co.....	5 22
3	796	Veterinary department.....	Chemical instruments.....	Eimer & Amend.....	112 25
3	797	Veterinary department.....	Chemical instruments.....	Whitall & Tatman.....	10 58
3	798	Book store.....	Blanks.....	D S Mussleman.....	26 14
4	799	Medical attendance.....	Steward.....	August Priorle.....	20 00
3	800	Expense.....	Exchange.....	First Nat Bank, Bryan.....	24 10
3	801	Maintenance.....	Meal, flour, etc.....	Texas Mill & Elevator Co.....	125 04
3	802	Campus.....	Labor.....	Samuel Ellis.....	7 00
6	803	Mechanical department.....	Pattern for casting.....	G M Dille & Sons.....	60 50
6	804	Expense.....	Freight.....	H & T Central Railway Co.....	25 80
6	805	Horticultural department.....	Plants.....	T V Munson.....	5 60
7	806	Expense.....	Box rent.....	J Q Tabor.....	1 00
8	807	Expense of board.....	Expense of Board Directors.....	W R Cavitt.....	3 00
8	808	Expense of board.....	Expense of Board Directors.....	L L Foster.....	9 10
8	809	Expense of board.....	Expense of Board Directors.....	A J Rose.....	26 40
8	810	Expense of board.....	Expense of Board Directors.....	John Adriance.....	13 45
9	811	Repairs.....	Labor.....	James Chapman.....	7 15
9	812	Repairs.....	Repairs.....	Peter Winter.....	2 50
10	813	Fence.....	Repairs.....	J H Subers, Jr.....	27 00
11	814	Farmers' Institute.....	Trip to Henrietta.....	G W Curtis.....	23 75
14	815	Library.....	Houston Post.....	Houston Publishing Co.....	5 10
14	816	Library.....	Daily Gazette.....	Democrat Publishing Co.....	7 50
14	817	Library.....	Dallas News.....	Dallas News Co.....	7 50
15	818	Farmers' Institute.....	Expense attending F I.....	L L McInnis.....	22 35
15	819	Expense.....	Paper.....	G W Norrill.....	1 50
15	820	Repairs.....	Glasses.....	G W Norrill.....	1 75
15	821	Maintenance.....	Hardware.....	Wm Koppe.....	12 25
15	822	Agricultural department.....	Coru.....	S A Scott.....	122 07
18	823	Mechanical department.....	Freight.....	Geo M Dille & Sons.....	3 10
15	824	Chemical department.....	Charcoal.....	Carson, Sewall & Co.....	1 20
15	825	Drawing department.....	Lumber.....	Garb, Nash & Robinson.....	3 15
16	826	Agricultural department.....	Boar pig.....	W R Cavitt.....	10 00
16	827	Expense.....	Oil.....	G W Norrill.....	1 75
16	828	Repairs.....	Putty.....	E J Fountain & Co.....	1 00
16	829	Repairs.....	Lumber.....	Garth, Nash & Robinson.....	4 50
16	830	Repairs.....	Paints.....	James Bute.....	18 46
16	831	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	6 30



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series*  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Jan.					
16	832	Horticultural department.....	Drugs.....	Whitall, Talum & Co.....	\$7 61
17	833	Horticultural department.....	Express.....	Wells, Fargo & Co.....	3 85
17	834	Maintenance.....	Express.....	Wells, Fargo & Co.....	16 90
17	835	Book store.....	Stationery.....	James W Queen & Co.....	59 27
17	836	Horticultural department.....	Seeds.....	Plant Seed Co.....	17 60
17	837	Repairs.....	Repairs.....	J W Carson.....	11 00
17	838	Maintenance.....	Wood.....	J H Subers.....	24 00
17	839	Campus.....	Teamster.....	Samuel Ellis.....	4 50
20	840	Repairs.....	Repairing blackboards.....	G Pletzer.....	8 50
20	841	Expense.....	316 feet of blackboard.....	Samuel King.....	19 08
22	842	Farmers' Institute.....	Frip to Henrietta.....	M Francis.....	24 10
22	843	Medical attendance.....	Drugs.....	I S Lyons & Co.....	34 91
22	844	Expense.....	Crape.....	Well Bros.....	9 18
22	845	Refunded.....	On account of sickness.....	J W Smith.....	10 00
22	846	Maintenance.....	Laundry.....	Excelsior Steam Laundry.....	144 30
31	847	Salary.....	Prof of mathematics.....	L L McInnis.....	294 44
31	848	Salary.....	Professor languages.....	R Wippricht.....	222 22
31	849	Salary.....	Associate Prof Vet Science.....	M F Reids.....	83 33
31	850	Salary.....	Instructor of rawing.....	F E Giesecke.....	111 11
31	851	Salary.....	Prof of chemistry.....	H H Harrington.....	200 00
31	852	Salary.....	Professor agriculture.....	George W Curtis.....	200 00
31	853	Salary.....	Prof of English.....	W L Bringham.....	250 00
31	854	Salary.....	Prof mechanical engineering.....	R H Whitlock.....	250 00
31	855	Salary.....	Prof civil engineering.....	Chas Puryear.....	166 66
31	856	Salary.....	Asst Prof chemistry.....	D Adriaance.....	33 33
31	857	Salary.....	Asst Prof agriculture.....	J W Carson.....	33 33
31	858	Salary.....	Asst Prof mechanical Eng.....	Paul Brow.....	50 00
31	859	Salary.....	Asst Prof of English.....	W B Philpott.....	75 00
31	860	Salary.....	Adj Prof mathematics.....	R F Smith.....	111 11
31	861	Salary.....	Prof of horticulture.....	T L Brunk.....	116 66
31	862	Salary.....	Instructor blacksmithing.....	A M Guenther.....	50 00
31	863	Salary.....	Asst Prof of horticulture.....	H S Jennings.....	50 00
31	864	Salary.....	Prof of mathematics.....	J D Fearhake.....	50 00
31	865	Maintenance.....	Steward.....	B Sbis.....	150 00
31	866	Salary.....	Agent board of directors.....	T M Scott.....	62 50
31	867	Medical attendance.....	Surgeon.....	J D Read.....	100 00
31	868	Salary.....	Foreman of shop.....	C A Lewis.....	60 00
31	869	Salary.....	Foreman of farm.....	J H Alsworth.....	66 66
31	870	Salary.....	Foreman of orchard.....	C E Barnett.....	30 00
31	871	Salary.....	Chaplain.....	C P Fountain.....	100 00
31	872	Salary.....	Foreman of garden.....	H Ness.....	41 66
31	873	Salary.....	Stockman.....	F Morrill.....	50 00
31	874	Medical attendance.....	Hospital nurse.....	A Prinzie.....	20 00
31	875	Maintenance.....	Janitors.....	E W Hutchinson.....	88 00
31	876	Maintenance.....	Bookkeeper.....	E W Hut hinson.....	16 67
31	877	Maintenance.....	Drummer.....	J B Fisk.....	20 00
31	878	Fine stock.....	Stock.....	W B Montgomery.....	333 94
31	879	Fine stock.....	Holstein Friesian bull.....	J W Howard.....	65 00
31	880	Fine stock.....	Freight.....	G W Curtis.....	90 74
31	881	Chemical department.....	Freight.....	H & T C Ry Co.....	4 83
31	882	Library.....	Freight.....	H & T C Ry Co.....	4 19
31	883	Library.....	Blinds.....	A Bering & Bros.....	21 14
31	884	Drawing department.....	Lumber.....	A Bering & Bros.....	5 00
31	885	Maintenance.....	Wood.....	J H Subers, Jr.....	84 00
Feb.					
1	886	Society rooms.....	Furniture.....	H Waddell.....	136 05
1	887	Horticultural department.....	Freight.....	Wells, Fargo & Co.....	1 20
1	888	Expense.....	Freight.....	Wells, Fargo & Co.....	70
1	889	Maintenance.....	Freight.....	Wells, Fargo & Co.....	21 30
1	890	Expense.....	Freight.....	Wells, Fargo & Co.....	1 20
1	891	Maintenance.....	Beef.....	W C Boyett.....	592 93
3	892	Agricultural department.....	Labor.....	J H Alsworth.....	40 50
4	893	Farmers' Institute.....	Traveling expenses.....	H Harrington.....	18 10
5	894	Horticultural department.....	Labor.....	H S Jennings.....	21 48
7	895	Maintenance.....	Supplies.....	B Sbis.....	792 90
7	896	Campus.....	Teamster.....	Samuel Ellis.....	13 50
8	897	Maintenance.....	Buckets.....	J S Brown Co.....	4 60
8	898	Maintenance.....	Flour and meal.....	Texas Mill & Elevator Co.....	113 15

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series

1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Feb.					
8	899	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	\$351 15
8	900	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	105 90
8	901	Repairs.....	Elbows, plugs, etc.....	Wm Koppe.....	1 40
8	902	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	99 97
10	903	Mechanical department.....	Oil.....	E J Fountain.....	6 50
10	904	Repairs.....	Hardware.....	Wm Koppe.....	3 30
10	905	Mechanical department.....	Lumber.....	Garth, Nash & Robinson...	15 94
10	906	Drawing department.....	Butts.....	Wm Koppe.....	20
Jan.					
31	907	Library.....	Brass butts.....	Wm Koppe.....	75
Feb.					
10	908	Chemical department.....	Leather.....	Hanway & Son.....	25
10	909	Chemical department.....	Pans.....	Wm Koppe.....	4 30
10	910	Drawing department.....	Cabinet.....	Fink & Braats.....	25 00
10	911	Mechanical department.....	Coal.....	Joseph Locke.....	11 56
10	912	Chemical department.....	Supplies.....	G W Norrill.....	1 40
10	913	Veterinary department.....	Drugs.....	G W Norrill.....	65
10	914	Veterinary department.....	Repairs.....	Bauch & Lomb Opt Co.....	1 00
10	915	Agricultural department.....	Oil.....	G W Norrill.....	1 45
10	916	Horticultural department.....	Potatoes.....	J W English.....	7 00
10	917	Farmers' Institute.....	Traveling expenses.....	W B Philpott.....	17 60
11	918	Agricultural department.....	Labor.....	J H Alsworth.....	37 50
11	919	Book store.....	Books.....	Baker & Taylor.....	117 63
11	920	Book store.....	Screws.....	James W Queen & Co.....	3 00
11	921	Book store.....	Pruning shears.....	Moroney Hardware Co.....	4 95
11	922	Book store.....	Paper.....	E Morrison.....	34 50
11	923	Library.....	Periodicals.....	A H Roffe.....	146 45
11	924	Horticultural department.....	General supplies.....	S T Ba-sing.....	10 85
11	925	Hospital equipment.....	Bowls.....	Wm Koppe.....	1 50
11	926	Bookstore.....	Magnifiers.....	Bausch & Lomb Opt Co.....	19 15
12	927	Expense.....	Road tax.....	E W Hutchinson.....	3 75
12	928	Maintenance.....	Glassware.....	J F Dumble.....	14 05
13	929	Mechanical department.....	Oil.....	E J Fountain.....	90
13	930	Society rooms.....	Chairs.....	Mitchell Furniture Co.....	220 00
13	931	Agricultural department.....	Saddlery.....	Hanway & Son.....	10 65
13	932	Fine stock.....	Freight.....	G W Curtis.....	3 60
13	933	Maintenance.....	Lanterns.....	Wm Koppe.....	3 05
13	934	Maintenance.....	Gas.....	Waters-Pierce Oil Co.....	84 84
13	935	Horticultural department.....	Seed.....	Plant Seed Co.....	2 50
13	936	Chemical department.....	Supplies.....	Eimer & Amend.....	6 54
13	937	Bookstore.....	Note books.....	B Westerman.....	25 87
15	938	Repairs.....	Sand.....	W J Moore.....	2 50
15	939	Refunded.....	Absence.....	J M Rogers.....	22 65
15	940	Refunded.....	Absence.....	W O Aldredge.....	7 00
15	941	Refunded.....	Absence.....	W A Mallick.....	8 00
15	942	Refunded.....	Absence.....	H C Henry.....	20 95
15	943	Repairs.....	Cement.....	P Winter.....	1 00
15	944	Refunded.....	Absence.....	P F Hagemann.....	20 35
15	945	Refunded.....	Sickness.....	H B Wade.....	15 00
15	946	Refunded.....	Sickness.....	J S Veogey.....	15 00
15	947	Maintenance.....	Wood.....	J H Subers.....	52 00
15	948	Maintenance.....	Express.....	Wells, Fargo & Co.....	23 95
17	949	Expense.....	Express.....	Wells, Fargo & Co.....	1 55
17	950	Repairs.....	Labor.....	James Chapman.....	22 50
20	951	Mechanical department.....	Tools.....	F Van Wiukle.....	45 65
20	952	Mechanical department.....	Material.....	Wm Koppe.....	13 16
22	953	Campus.....	Labor.....	Samuel Ellis.....	4 50
24	954	Expense.....	Trip to Austin.....	L L McInnis.....	8 05
24	955	Maintenance.....	Laundry.....	Excelsior Steam Laundry...	107 40
24	956	Military department.....	Arms and accoutrements.....	S V Bennett.....	258 31
24	957	Book store.....	Books.....	B Westerman.....	138 71
24	958	Society rooms.....	Desk.....	H Waddell.....	17 85
24	959	Book store.....	Books.....	John Wiley & Sons.....	4 34
24	960	Book store.....	Stationery.....	H Albrecht & Son.....	61 38
24	961	Farmers' Institute.....	Traveling expenses.....	G W Curtis.....	15 50
24	962	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	13 40
24	963	Mechanical department.....	Bolts, etc.....	Wm Koppe.....	2 85
25	964	Maintenance.....	Repairs.....	A Harbers.....	10 06

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Feb.					
26	965	Board of Directors.....	Traveling expenses.....	J D Fields.....	\$15 60
28	966	Expense.....	Receipts.....	Geo W Norrill.....	1 20
28	967	Maintenance.....	Laundry.....	Excelsior Laundry Co.....	54 60
28	968	Maintenance.....	Cans.....	Wm Koppe.....	6 80
28	969	Maintenance.....	Couplings.....	Cole Bros.....	1 50
28	970	Salaries.....	Prof of English.....	W L Bringham.....	2 50
28	971	Salaries.....	Prof of Languages.....	R Whipprecht.....	222 22
28	972	Salaries.....	Prof of Chem and Min.....	H H Harrington.....	200 00
28	973	Salaries.....	Instructor in Drawing.....	F E Glesieke.....	111 11
28	974	Salaries.....	Prof of Veterinary Science.....	M Francis.....	83 33
28	975	Salaries.....	Prof of Mathematics.....	L L McInnis.....	294 44
28	976	Salaries.....	Prof of Mechanical Eng.....	R H Whitlock.....	250 00
28	977	Salaries.....	Prof of Agriculture.....	G W Curtis.....	200 00
28	978	Salaries.....	Prof of Civil Eng and Phys.....	Charles Puryear.....	166 66
28	979	Salaries.....	Assistant professor chemistry.....	D Adriance.....	33 33
28	980	Salaries.....	Assistant prof agricultural.....	J M Carson.....	33 33
28	981	Salaries.....	Asst. mechanical engineering.....	P Braun.....	50 00
28	982	Salaries.....	Asst Prof Eng and History.....	W B Philpott.....	75 00
28	983	Salaries.....	Adj Prof of Mathematics.....	R F Smith.....	111 11
28	984	Salaries.....	Prof of Horticulture.....	T L Brunk.....	116 66
28	985	Salaries.....	Instructor blacksmithing.....	A M Guenther.....	50 00
28	986	Salaries.....	Asst Prof of Hort and Bot.....	H S Jennings.....	50 00
28	987	Salaries.....	Asst Prof of M E and Phys.....	J D Fearhake.....	50 00
28	988	Salaries.....	Steward.....	B Sblsa.....	150 00
28	989	Salaries.....	Agent of board.....	T M Scott.....	62 50
28	990	Salaries.....	Surgeon.....	J D Read.....	100 00
28	991	Salaries.....	Foreman of shop.....	C A Lewis.....	60 00
28	992	Salaries.....	Foreman of farm.....	J H Alsworth.....	66 66
28	993	Salaries.....	Foreman of orchard.....	C E Barne t.....	30 00
28	994	Salaries.....	Chaplain.....	C P Fountain.....	100 00
28	995	Salaries.....	Gardener.....	H Nes.....	41 66
28	996	Salaries.....	Stockman.....	F Morrill.....	50 00
28	997	Medical attendance.....	Nurse.....	A Prinzel.....	20 00
28	998	Maintenance.....	Bookkeeper.....	E W Hutchinson.....	16 67
28	999	Maintenance.....	Janitors.....	E W Hutchinson.....	85 50
28	1000	Maintenance.....	Drummer.....	J B Fisk.....	20 00
28	1001	Expense.....	But s and screws.....	J S Brown Hardware Co.....	20 04
28	1002	Mechanical department.....	Lumber.....	Garth, Nash & Robinson.....	24 17
28	1003	Campus.....	Lumber.....	Garth, Nash & Robinson.....	22 00
28	1004	Drawing department.....	Brass bars.....	Wm Koppe.....	25
28	1005	Library.....	Varnish brush.....	G W Norrill.....	50
28	1006	Agricultural department.....	Oil.....	G W Norrill.....	1 75
28	1007	Expense.....	Drugs.....	I L Lyons.....	3 00
Mar.					
11	1008	Horticultural department.....	Chemicals.....	T L Brunk.....	2 10
11	1009	Farmer Institute.....	Attending meeting.....	T L Brunk.....	31 10
11	1010	Book store.....	Books.....	G W Curti.....	5 25
11	1011	Student labor.....	Labor.....	H S Jennings.....	3 60
11	1012	Horticultural department.....	Labor.....	H S Jennings.....	26 00
11	1013	Expense.....	Stamps.....	W C Boyett.....	49 20
11	1014	Maintenance.....	Beef.....	W C Boyett.....	472 99
11	1015	Agricultural department.....	Labor.....	J H Alsworth.....	39 25
11	1016	Veterinary department.....	Express.....	Wells-Fargo Express Co.....	1 20
11	1017	Agricultural department.....	Express.....	Wells-Fargo Express Co.....	1 10
11	1018	Maintenance.....	Express.....	Wells-Fargo Express Co.....	15 60
11	1019	Express.....	Express.....	Wells-Fargo Express Co.....	66 15
11	1 20	Campus.....	Labor.....	Samuel Ellis.....	4 50
11	1021	Agricultural department.....	Labor.....	J H Alsworth.....	35 00
11	1022	Expense.....	Stationery.....	J J Pastoriza.....	12 50
11	1023	Maintenance.....	Groceries.....	Carson, Sewall & Co.....	498 01
11	1024	Maintenance.....	Miscellaneous.....	B Sblsa.....	754 17
11	1025	Mechanical department.....	Wood.....	J H Subers, Jr.....	55 60
11	1026	Campus.....	Labor.....	Samuel Ellis.....	9 00
11	1027	Horticultural department.....	Labor.....	J W Carson.....	7 50
11	1028	Student labor.....	Labor.....	F ri McInnis.....	6 40
11	1029	Expense.....	Trip to Houston.....	L L Foster.....	31 35
11	1030	Refunded.....	Refunded.....	R L Smi h.....	15 00
11	1031	Refunded.....	Refunded.....	J E Boyce.....	55 89



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series*  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Mar.					
11	1032	Refunded.....	Refunded.....	C F Fisher.....	\$55 00
11	1033	Maintenance.....	Meal.....	L A Scott.....	11 89
11	1034	Expense.....	Type writer cloths.....	G W Merchant.....	3 00
11	1035	Agricultural department.....	Labor.....	J M Carson.....	3 60
11	1036	Maintenance.....	Flour.....	Texas Mill and Elevator Co.....	7 15
11	1037	Maintenance.....	Washing.....	Excelsior Laundry.....	54 00
11	1038	Expense.....	Dictionary.....	C H Evans & Co.....	5 00
11	1039	Maintenance.....	Glassware.....	J T Dumble.....	9 90
11	1040	Maintenance.....	Towels.....	Sanger Bros.....	37 61
11	1041	Mechanical department.....	Bronze screw.....	Manning Maxwell.....	2 00
11	1042	Mechanical department.....	Coal.....	F W Heitmann & Co.....	4 75
11	1043	Chemical department.....	Stop cock.....	Wm Koppe.....	1 40
11	1044	Medical attendance.....	Medicine.....	J Fountain.....	1 50
11	1045	Chemical department.....	Apparatus.....	Elmer & Amend.....	118 85
11	1046	Expense.....	Virus.....	Roberts & Fellows.....	22 05
11	1047	Expense.....	Stationery.....	G W Norrill.....	1 25
11	1048	Agricultural department.....	Oil.....	G W Norrill.....	1 10
11	1049	Maintenance.....	Buckets.....	J S Brown Hardware Co.....	13 15
11	1050	Expense.....	Magnesia.....	Behrns & Castels.....	1 75
11	1051	Maintenance.....	Oil.....	Waters-Pierce Oil Co.....	69 04
11	1052	Agricultural department.....	Hogs.....	American Essex As.....	6 00
11	1053	Agricultural department.....	Registering cattle.....	Holstien-Friesian As.....	1 50
11	1054	Engineering department.....	Instruments.....	Jas W Queen & Co.....	133 05
11	1055	Mechanical department.....	Awning.....	Mo Tent & Awning Co.....	40 45
11	1056	Horticultural department.....	Hardware.....	Cole Bros.....	6 20
11	1057	Chemical department.....	Milk tubes.....	E Greiner.....	7 30
11	1058	Mechanical department.....	Washer.....	Wm Koppe.....	40
11	1059	Agricultural department.....	Wagon tongue.....	A Oswald.....	2 75
11	1060	Book store.....	Books.....	P V Penrypacker.....	40 50
11	1061	Students' labor.....	Labor.....	J M Carson.....	5 00
11	1062	Farmers' Institute.....	Attending meeting.....	M Francis.....	14 20
11	1063	Labor.....	Labor.....	W R Reed.....	9 60
11	1064	Maintenance.....	Flour.....	Texas Mill & Elevator Co.....	124 45
11	1065	Campus.....	Lumber.....	Garth, Nash & Robinson.....	8 96
11	1066	Library.....	Lumber.....	Garth, Nash & Robinson.....	17 04
11	1067	Maintenance.....	Lumber.....	Garth, Nash & Robinson.....	19 87
11	1068	Mechanical department.....	Machinery.....	F Van Winkle.....	103 21
11	1069	Horticultural department.....	Express.....	Wells-Fargo Express Co.....	1 10
11	1070	Maintenance.....	Express.....	Wells-Fargo Express Co.....	26 35
11	1071	Chemical department.....	Express.....	Wells-Fargo Express Co.....	1 00
11	1072	Horticultural department.....	Seed.....	Plant Seed Co.....	2 60
11	1073	Societies.....	Carpet.....	W A Dodson.....	8 85
11	1074				
11	1075	Hospital equipment.....	Shades.....	B Sbis.....	2 25
11	1076	Library.....	Books.....	Jersey Bulletin.....	4 00
11	1077	Meeting of board.....	Attending meeting.....	W R Cavit.....	14 65
11	1078	Veterinary department.....	Chemicals.....	Garth, Nash & Robinson.....	70
11	1079	Agricultural department.....			
11	1080	Experiment station.....	Meal.....	National Cotton Oil Co.....	217 36
11	1081	Refunded.....	Refunded.....	A B Paer.....	20 00
11	1082	Refunded.....	Refunded.....	A J Rosenthal.....	28 90
11	1083	Refunded.....	Refunded.....	L W Rawley.....	15 00
11	1084	Maintenance.....	Paint.....	G W Norrill.....	5 90
21	1085	Agricultural department.....	Freight.....	H & T C Ry Co.....	40 52
21	1086	Maintenance.....	Laundry.....	Excelsior Laundry.....	109 80
21	1087	Expense.....	Stove fixtures.....	Wm Koppe.....	14 90
21	1088	Society.....	Curtains.....	H Waddell.....	29 45
21	1089	Book store.....	Stationery.....	J W Queen & Co.....	26 78
21	1090	Book store.....	Books.....	John Wiley & Son.....	2 17
21	1091	Maintenance.....	Brackets.....	J S Brown Hardware Co.....	7 31
21	1092	Maintenance.....	Lime.....	Malk Chemical Works.....	50 60
21	1093	Expense.....	Shades.....	H Waddell.....	27 00
21	1094	Mechanical department.....	Tools.....	Wm Koppe.....	4 45
24	1095	Engineering department.....	Transit.....	Jas W Queen & Co.....	28 05
24	1096	Mechanical department.....	Steps.....	J S Brown Hardware Co.....	1 05
24	1097	Salaries.....	Teacher.....	L L McInnis.....	294 44
24	1098	Salaries.....	Teacher.....	W L Bringhurst.....	250 00
24	1099	Salaries.....	Teacher.....	R Wipprecht.....	222 22



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series*  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Mar.					
24	1100	Salaries .....	Teacher .....	R H Whitlock .....	\$250 00
24	1101	Salaries .....	Teacher .....	H H Harrington .....	200 00
24	1102	Salaries .....	Teacher .....	G W Curtis .....	200 00
24	1103	Salaries .....	Teacher .....	F E Giesecke .....	111 11
24	1104	Salaries .....	Teacher .....	M Francis .....	83 33
24	1105	Salaries .....	Teacher .....	R F Smith .....	111 11
24	1106	Salaries .....	Teacher .....	T L Brunk .....	116 66
24	1107	Salaries .....	Teacher .....	Chas Puryear .....	166 66
24	1108	Salaries .....	Teacher .....	J M Carson .....	33 33
24	1109	Salaries .....	Teacher .....	W B Philpott .....	75 00
24	1110	Salaries .....	Teacher .....	P Braun .....	50 00
24	1111	Salaries .....	Teacher .....	J D Fearhake .....	50 00
24	1112	Salaries .....	Teacher .....	H Jennings .....	50 00
24	1113	Salaries .....	Teacher .....	A M Guenther .....	50 00
24	1114	Salaries .....	Teacher .....	A Lewis .....	60 00
24	1115	Salaries .....	Teacher .....	F M Morrell .....	50 00
24	1116	Salaries .....	Foreman of greenhouse .....	H Ness .....	41 66
24	1117	Salaries .....	Foreman of garden .....	C E Barnett .....	30 00
24	1118	Salaries .....	Chaplain .....	C P Fountain .....	100 00
24	1119	Maintenance .....	Steward .....	B Sbsa .....	150 00
24	1120	Maintenance .....	Bookkeeper .....	E W Hutchinson .....	16 67
24	1121	Maintenance .....	Janitor .....	E W Hutchinson .....	
11	1122	Medical attendance .....	Services .....	J D Read .....	10 00
11	1123	Medical attendance .....	Steward .....	A Prinsel .....	20 00
11	1124	Salaries .....	Foreman of farm .....	J H Alsworth .....	66 66
11	1125	Salaries .....	Teacher .....	D Adance .....	33 33
11	1126	Farmers' Institute .....	Attending meeting .....	T L Brunk .....	20 85
11	1127	Agricultural department .....	Corn .....	P Harrison .....	134 05
11	1128	Agricultural department .....	Bran .....	Peck & Reed .....	10 86
11	1129	Expense .....	Chairs .....	Nat School Supply Co .....	14 85
11	1130	Maintenance .....	Labor .....	James Chapman .....	27 50
11	1131	Agricultural department .....	Wood .....	J H Subers .....	3 20
11	1132	Farmers' Institute .....	Expense .....	H H Harrington .....	26 80
11	1133	Agricultural department .....	Labor .....	J H Alsworth .....	30 26
11	1134	Labor .....	Labor .....	F H McInnis .....	24 00
11	1135	Expense .....	Rubber stamps .....	Thalman Mfg Co .....	5 46
11	1136	Expense .....	Advertising .....	R L Polk & Co .....	35 00
11	1137	Agricultural department .....	Lit seed meal .....	Linseed Oil Co .....	18 00
31	1138	Agricultural department .....	Cow peas .....	S Myers .....	52 10
Apr.					
1	1139	Military department .....	Transportation .....	H & T C Ry Co .....	11 38
1	1140	Horticultural department .....	Labor .....	H S Jennings .....	28 00
1	1141	Labor .....	Labor .....	H S Jennings .....	1 75
1	1142	Farmers' Institute .....	Traveling expense .....	Charles Puryear .....	21 45
1	1143	Farmers' Institute .....	Trip to Paris .....	J M Carson .....	25 00
1	1144	Maintenance .....	Beef .....	W C Foyett .....	253 47
1	1145	Expense .....	Postage .....	W C Boyett .....	3 50
2	1146	Maintenance .....	Express .....	Wells, Fargo & Co .....	24 95
2	1147	Maintenance .....	Express .....	Wells, Fargo & Co .....	7 20
1	1148	Maintenance .....	Groceries .....	B Sbsa .....	850 24
3	1149	Refunded .....	Dismissed .....	E W Hutchinson .....	210 00
7	1150	Hospital equipment .....	Mattresses .....	Scarritt Furniture Co .....	61 66
7	1151	Agricultural department .....	Registering .....	L P Muir .....	2 25
7	1152	Drawing department .....	Lumber .....	Garth, Nash & Robinson .....	3 20
14	1153	Hospital equipments .....	Lumber .....	Garth, Nash & Robinson .....	6 04
14	1154	Library .....	Books .....	B Westerman & Co .....	4 95
14	1155	Book store .....	Books .....	B Westerman & Co .....	
14	1156	Maintenance .....	Lumber .....	Garth, Nash & Robinson .....	13 69
14	1157	Maintenance .....	Groceries .....	Carson, S-w II & Co .....	31 32
14	1158	Maintenance .....	Hardware .....	S Davis Mfg Co .....	31 30
14	1159	Maintenance .....	Oil .....	Waters-Pierce Oil Co .....	151 50
14	1160	Maintenance .....	Meal .....	L A Scott .....	16 50
14	1161	Expense .....	Box rent .....	Bryan postoffice .....	1 09
14	1162	Expense .....	Printing .....	Bryan Eagle .....	2 50
14	1163	Expense .....	Lithographing .....	Mavericks & W .....	51 75
14	1164	Maintenance .....	B rners .....	Ripley & Bronson .....	7 50
14	1165	Horticultural department .....	Plow po'nt .....	Wm Koppe .....	90
14	1166	Horticultural department .....	Lime .....	Sanders, McGee & Co .....	16

## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series*  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Apr. 14	1167	Maintenance.....	Brass locks.....	J S Brown Hardware Co....	\$5 58
14	1168	Drawing department.....	Brass locks.....	J S Brown Hardware Co....	3 60
14	1169	Mechanical department.....	Castings, etc.....	Simpson, Hartwell & Son..	4 45
14	1170	Mechanical department.....	Pipe.....	Wm Koppe.....	3 05
14	1171	Chemical department.....	Oil.....	G W Norrill.....	85
14	1172	Chemical department.....	Elbows.....	Wm Koppe.....	10
14	1173	Agricultural department.....	Sorghum seed.....	Pittman & Harrison.....	25 85
14	1174	Student labor.....	Labor.....	J M Carson.....	7 00
14	1175	Expense.....	Exchange.....	1st National Bank, Bryan..	36 47
14	1176	Water supply.....	Part payment on cistern.....	Peter Winter.....	14 00
14	1177	Agricultural department.....	Labor.....	J H Alsworth.....	20 50
14	1178	Expense.....	Trip to Austin.....	L L McInnis.....	5 05
14	1179	Maintenance.....	Groceries.....	Carson, Sewell & Co.....	136 45
14	1180	Expense.....	Advertising.....	College Journal.....	31 50
14	1181	Mechanical department.....	Paint.....	Joseph Dixon Co.....	17 18
14	1182	Repairs.....	Lime and cement.....	Garth, Howell & Wmson..	17 11
14	1183	Maintenance.....	Express.....	Wells, Fargo & Co.....	4 55
14	1184	Maintenance.....	Express.....	Wells, Fargo & Co.....	19 70
14	1185	Book store.....	Drawing paper.....	J W Queen & Co.....	11 07
14	1186	Horticultural department.....	Pump, etc.....	Nixon & Noel M ch Co..	20 25
14	1187	Museum.....	Picture moulding.....	Louis White.....	28 88
14	1188	Maintenance.....	Oil.....	G W Norrill.....	85
14	1188	Mechanical department.....	Oil.....	G W Norrill.....	1 50
14	1188	Agricultural department.....	Oil.....	G W Norrill.....	6 95
14	1188	Drawing department.....	Oil.....	G W Norrill.....	5 30
14	1189	Agricultural department.....	Track.....	L F Fuller.....	1 60
14	1190	Maintenance.....	Laundry.....	Excelsior Laundry.....	155 40
14	1191	Mechanical department.....	Wheelbarrows, etc.....	Wm Koppe.....	2 60
14	1191	Campus.....	Wheelbarrows, etc.....	Wm Koppe.....	1 45
14	1191	Agricultural department.....	Wheelbarrows, etc.....	Wm Koppe.....	8 30
14	1191	Maintenance.....	Wheelbarrows, etc.....	Wm Koppe.....	50
14	1191	Library.....	Wheelbarrows, etc.....	Wm Koppe.....	25
14	1192	Agricultural department.....	Labor.....	J H Alsworth.....	28 35
14	1193	Civil Engineering dept.....	Lumber.....	Garth, Howell & Wmson..	7 24
14	1193	Mechanical Eng dept.....	Lumber.....	Garth, Howell & Wmson..	6 72
14	1194	Agricultural department.....	Salt.....	Cole, Buford & Co.....	6 38
14	1195	Agricultural department.....	Millet seed.....	Hall & Astin.....	5 00
14	1196	Museum.....	Glass.....	Jas Butte.....	12 90
14	1197	Veterinary department.....	Skeletons.....	J W Queen & Co.....	289 50
14	1197	Drawing department.....	Scale.....	J W Queen & Co.....	9 78
14	1198	Refunded.....	Refunded.....	T W Hill.....	18 00
14	1199	Maintenance.....	Freight.....	H & T C Ry Co.....	6 91
14	1200	Veterinary department.....	Freight.....	H & T C Ry Co.....	7 35
28	1201	Military department.....	Freight.....	H & T C Ry Co.....	3 75
28	1202	Refunded.....	Paid cadet.....	A K Hathaway.....	25 00
28	1203	English department.....	Maps.....	Secretary interior.....	2 53
28	1204	Maintenance.....	Groceries.....	Wm Koppe.....	698 72
28	1205	Maintenance.....	Groceries.....	Carson, Sewell & Co.....	474 53
28	1206	Farmers' Institute.....	Trip to Belton.....	George W Curtis.....	10 60
28	1207	Farmers' Institute.....	Trip to Belton.....	M Francis.....	11 85
28	1208	Maintenance.....	Dishes.....	J F Dumble.....	27 73
28	1209	Library.....	Books.....	B Westerman & Co.....	13 48
28	1210	Salaries.....	Teacher.....	L L McInnis.....	294 44
28	1211	Salaries.....	Teacher.....	W L Bringham.....	250 00
28	1212	Salaries.....	Teacher.....	R H Whitlock.....	250 00
28	1213	Salaries.....	Teacher.....	R Wipprich.....	222 22
28	1214	Salaries.....	Teacher.....	G W Curtis.....	200 00
28	1215	Salaries.....	Teacher.....	H H Harrington.....	200 00
28	1216	Salaries.....	Teacher.....	T L Brunk.....	116 66
28	1217	Salaries.....	Teacher.....	M Francis.....	83 33
28	1218	Salaries.....	Teacher.....	C Puryear.....	166 66
28	1219	Salaries.....	Teacher.....	F E Giessecke.....	111 11
28	1220	Salaries.....	Teacher.....	R F Smith.....	111 11
28	1221	Salaries.....	Teacher.....	W B Philpott.....	75 00
28	1222	Salaries.....	Teacher.....	P Braun.....	50 00
28	1223	Salaries.....	Teacher.....	J M Carson.....	33 33
28	1224	Salaries.....	Teacher.....	D Adriance.....	33 33
28	1225	Salaries.....	Teacher.....	H S Jennings.....	50 00

## EXHIBIT B—continued.

List of warrants paid by Secretary from June, 1888, to May, 1890—Series  
1888-1890.

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
Apr.					
28	1226	Salaries .....	Teacher .....	J F Fearhake.....	\$50 00
28	1227	Salaries .....	Teacher .....	A M Guenther.....	50 00
28	1228	Salaries .....	Foreman of shop.....	C A Lewis.....	60 00
28	1229	Salaries .....	Foreman of farm .....	J H Alsworth.....	60 66
28	1230	Salaries .....	Stockman.....	Frank Morrill.....	50 00
28	1231	Salaries .....	Foreman of greenhouse.....	H Ness.....	41 66
28	1232	Salaries .....	Foreman of vi yard.....	C E Barnett.....	30 00
28	1233	Salaries .....	Chaplain .....	C P Fountain.....	100 00
28	1234	Salaries .....	Medical att ndance.....	J D Reed.....	100 00
28	1235	Maintenance .....	Steward .....	B Sbsa.....	150 00
28	1236	Maintenance .....	Janitors .....	E W Hutchinson .....	103 50
28	1237	Maintenance .....	Sec-tary.....	E W Hutchinson .....	16 67
28	1238	Refunded.....	Paid cadet.....	L R Burleson.....	7 20
28	1239	Maintenance .....	Beef.....	W C Boyett.....	244 40
28	1240	Agricultural department.....	Killing beeves.....	W C Boyett.....	20 00
28	1241	Museum.....	Bottles, etc.....	Whitall, Tatum & Co.....	37 28
28	1342	Agricultural department.....	Labor .....	J H Alsworth.....	73 50
28	1243	Maintenance.....	Groceries.....	B Sbsa.....	760 37
May					
2	1244	Agricultural department.....	Labor .....	J H Alsworth.....	16 00
2	1245	Mai- tenance .....	Express .....	Wells, Fargo & Co.....	18 30
2	1245	Agricultural department.....	Express .....	Wells, Fargo & Co.....	30
2	1245	Drawing department.....	Express.....	Wells, Fargo & Co.....	60
2	1245	Ex ense .....	Express.....	Wells, Fargo & Co.....	25
2	1246	Horticultural department.....	Labor .....	H S Jennings.....	31 40
2	1247	Horticultural department.....	Harrow teeth.....	Cole Bros.....	2 00
2	1248	Veterinary department .....	Glycerine.....	G W Norrill.....	3 25
2	1249	Agricultural department.....	Collar pads.....	Derden & Tabor.....	1 25
2	1250	Horticultural department.....	Paper.....	J W English.....	90
2	1251	Mechanical department.....	Coal.....	Locke Grocery Co.....	5 66
2	1252	Chemical department.....	Wash basin, etc.....	L M Rumsey & Co.....	5 83
2	1253	Med cal attendance.....	Medicine .....	E J Fountain & Co.....	1 00
2	1254	Student labor .....	Labor .....	J rrrson .....	4 00
2	1255	Horticultural department.....	Labor .....	T L Brunk .....	1 60
2	1256	Medical attendance.....	Steward .....	A Prinzel.....	20 00
2	1257	Horticultural department.....	Labor .....	T L Brunk .....	1 00
2	1258	Expense of board.....	Attending meeting.....	A J Rose.....	53 85
2	1259	Museum.....	Lumber .....	Garth, Howell & W'mson.....	29 79
2	1260	Maintenance .....	Butterine.....	Armour Butterine Co.....	42 00
2	1261	Book store.....	Drawing paper.....	Clark & Courts.....	10 75
2	1262	Book store.....	Drawing paper.....	J J Pastoriza.....	3 00
2	1263	Refunded.....	R-funded cadet.....	W E Gieseke.....	15 00
2	1264	Maintenance .....	Groceries.....	Carson, Sewell & Co.....	11 20
2	1265	Campus .....	Track cleaner, etc.....	L T Fuller.....	5 70
2	1265	Agricultural department.....	Track cleaner, etc.....	L T Fuller.....	1 60
2	1266	Horticultural department.....	Bridles .....	Hanway & Son.....	1 20
2	1267	Fence .....	Walk gates.....	Texas Wire & Iron Co.....	9 33
2	1268	Agricultural department.....	Sharpening plow.....	A Oswald.....	80
2	1268	Agricultural department.....	Sharpening plow.....	A Oswald.....	50
2	1269	Maintenance .....	Oil .....	Waters-Pierce Oil Co.....	167 64
2	1270	Expense .....	Membership .....	H P Armsey .....	10 00
2	1271	Maintenance.....	Napkins.....	Mistrot Bros.....	5 36
2	1272	Maintenance.....	Laundry.....	Excelsior Steam Laundry.....	201 00
2	1273	Agricultural department.....	Labor .....	J H Alsworth.....	32 60
2	1274	Agricultural department.....	Labor .....	J H Alsworth.....	36 20
2	1255	Refunded.....	Paid to cadets.....	C Simons & J B Stratton.....	13 00
2	1276	Maintenance .....	Express.....	ells, Fargo & Co.....	19 60
2	1276	Expense.....	Express.....	Wells, Fargo & Co.....	65
2	1276	Book s ore .....	Express.....	Wells, Fa go & Co.....	55
2	1277	Student labor.....	Labor .....	E W Hutchinson.....	15 20
20	1278	Agricultural department.....	Wire cloth, etc.....	Wm Koppe.....	8 20
20	1278	Drawing department.....	Wire cloth, etc.....	Wm Koppe.....	1 12
20	1278	Maintenance .....	Wire cloth, etc.....	Wm Koppe.....	2 53
20	1279	Agricultural department.....	Amonia.....	I L Lyons & Co.....	8 10
20	1280	Horticultural department.....	Flse bibs.....	Brown Hardware Co.....	4 35
20	1281	Maintenance .....	Flse.....	Texas Mill & Elevator Co.....	73 92
20	1282	Military de artment.....	Freight.....	H & T C Ry Co.....	2 15
20	1283	Expense.....	Trip to Cincinnati.....	R H Whitlock.....	89 85
20	1284	Expense.....	Printing.....	Cox, Admire & Co.....	19 81



## EXHIBIT B—continued.

*List of warrants paid by Secretary from June, 1888, to May, 1890—Series 1888-1890.*

Date.	No. of warrant.	To what account charged.	For what expended.	To whom paid.	Amount.
1890					
May	1285	Medical attendance.....	Drugs.....	E J Fountain & Co.....	\$1 15
20	1286	Agricultural department.....	Sharpening plows.....	A Oswald.....	1 80
20	1287	Refunded.....	Paid cadet.....	O N Barnett.....	20 00
20	1283	Agricultural department.....	Wood.....	J H Subers.....	3 20
20	1289	Agricultural department.....	Labor.....	J H Alsworth.....	20 35
20	1290	Salaries.....	(Chairman.....	L L McInnis.....	294 44
20	1261	Salaries.....	Teacher.....	W L Bringham.....	250 00
20	1292	Salaries.....	Teacher.....	R Wippricht.....	222 22
20	1293	Salaries.....	Teacher.....	R H Whitlock.....	250 00
20	1294	Salaries.....	Teacher.....	G W Curtis.....	200 00
20	1295	Salaries.....	Teacher.....	H H Harrington.....	200 00
20	1296	Salaries.....	Teacher.....	C Puryear.....	166 66
20	1297	Salaries.....	Teacher.....	T L Brunk.....	116 66
20	1298	Salaries.....	Teacher.....	R F Smith.....	111 11
20	1299	Salaries.....	Teacher.....	F E Giessecke.....	111 11
20	1300	Salaries.....	Chaplain.....	C P Fountain.....	100 00
20	1301	Salaries.....	Teacher.....	Francis.....	83 33
20	1302	Salaries.....	Teacher.....	W B Philpott.....	75 00
20	1303	Salaries.....	Teacher.....	D Adriaance.....	33 33
20	1304	Salaries.....	Teacher.....	J M Carson.....	33 33
20	1305	Salaries.....	Teacher.....	P Braun.....	50 00
20	1306	Salaries.....	Teacher.....	J D Fearlake.....	50 00
20	1307	Salaries.....	Teacher.....	H S Jennings.....	50 00
20	1308	Salaries.....	Teacher.....	A M Guenther.....	50 00
20	1309	Salaries.....	Foreman of shop.....	C A Lewis.....	60 00
20	1310	Salaries.....	Foreman of greenhouse.....	H Ness.....	41 66
20	1311	Salaries.....	Stockman.....	F W Morrell.....	50 00
20	1312	Salaries.....	Foreman of vineyard.....	C E Barnett.....	30 00
20	1313	Salaries.....	Foreman of farm.....	J H Alsworth.....	66 66
20	1314	Salaries.....	Secretary.....	E W Hutchinson.....	16 67
20	1315	Maintenance.....	Janitors.....	E W Hutchinson.....	163 50
20	1316	Maintenance.....	Steward.....	B Sbia.....	150 00
20	1317	Salaries.....	Doctor.....	J D Reed.....	100 00
20	1318	Medical attendance.....	Hospital steward.....	A Prinsel.....	20 00
20	1319	Agricultural department.....	Drugs, etc.....	G W Norrill.....	83
20	1319	Expense.....	Drugs, etc.....	G W Norrill.....	10 95
20	1319	Chemical department.....	Drugs, etc.....	G W Norrill.....	60
20	1320	Expense.....	Telephone rent.....	S W Tel & Tel Co.....	60 00
20	1321	Maintenance.....	Washing.....	Excelsior Laundry.....	101 40
20	1322	Chemical department.....	Apparatuses, etc.....	E Greiner.....	156 60
20	1323	Maintenance.....	Towels.....	Mistrot Bros.....	5 50
20	1324	Maintenance.....	Meal.....	L A Scott.....	7 80
20	1325	Chemical department.....	Sole leather.....	R Blatherwick.....	40
20	1326	Medical attendance.....	Drugs, etc.....	James & Gentry.....	1 30
20	1327	Refunded.....	Paid cadet.....	G S Anderson.....	20 00
20	1328	Hospital equipments.....	Commode, etc.....	Scarritt Furniture Co.....	60 25
20	1329	Library.....	Books.....	W S Scott.....	9 50
20	1330	Maintenance.....	Groceries, etc.....	B Sbia.....	721 67
20	1331	Agricultural department.....	Labor.....	J H Alsworth.....	49 50
20	1332	Expense.....	Printing.....	Admire & Buchanan.....	9 00
20	1333	Agricultural department.....	Guards.....	L F Fuller.....	4 90
20	1334	Mechanical department.....	Auger.....	Cole Bros.....	1 00
20	1335	Agricultural department.....	Shellac.....	G W Norrill.....	2 00
20	1336	Mechanical department.....	Oil.....	G W Norrill.....	60
20	1336	Agricultural department.....	Collars.....	Hanway & Son.....	1 75
20	1337	Mechanical department.....	Hinges, etc.....	Wm Koppe.....	1 70
20	1337	Agricultural department.....	Labor.....	Wm Koppe.....	1 00
20	1338	Horticultural department.....	Sweep stocks.....	H S Jennings.....	29 00
20	1339	Agricultural department.....	Aug r bit.....	Wm Koppe.....	4 30
20	1340	Mechanical department.....	Express.....	Wm Koppe.....	1 00
20	1341	Maintenance.....	Express.....	Wells, Fargo & Co.....	21 05
20	1342	Agricultural department.....	Express.....	R A Brantley.....	70
20	1343	Agricultural department.....	Rope.....	Cole, Buford & Co.....	75
20	1344	Agricultural department.....	Drugs.....	G W Norrill.....	40
20	1345	Maintenance.....	Washing.....	Excelsior Laundry.....	51 00
20	1346	Museum.....	Cases.....	A P Beard.....	60 00
20	1347	Student labor.....	Labor.....	E W Hutchinson.....	21 15
20	1348	Experiment station.....	Balance due.....	Agricultural Exp Station.....	638 90
20	1349	Maintenance.....	Beef.....	W C Boyett.....	279 43







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